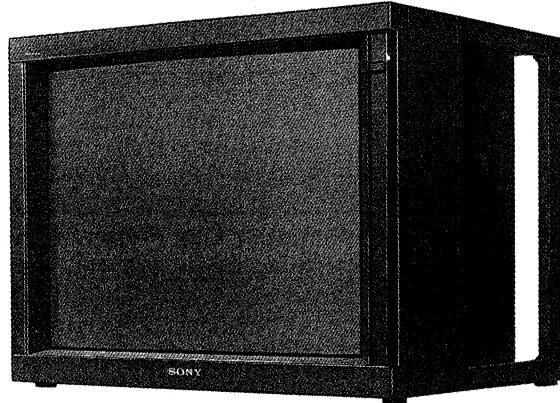


# PVM-2950Q / 2950QM

RM-854

## SERVICE MANUAL

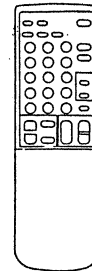


*US Model*  
*Canadian Model*  
PVM-2950Q

Chassis No. SCC-G61E-A

*AEP Model*  
PVM-2950QM  
Chassis No. SCC-G62D-A

*Aus Model*  
PVM-2950QM  
Chassis No. SCC-H03B-A



### MODELS OF THE SAME SERIES

PVM-2950Q/2950QM	

### SPECIFICATIONS

#### Video signal

##### Picture tube

29" Super Trinitron tube  
Visible picture size : 675 mm  
(27" measured diagonally)  
AG pitch : 0.70 - 0.85 mm  
Anti-glare & Anti-static  
NTSC, PAL, SECAM, NTSC4.43, PAL60  
600 TV lines at the center  
VIDEO : 7 MHz (-3 dB)  
S VIDEO : 8 MHz (-3 dB)  
RGB : 10 MHz (-3 dB)

##### Color system

##### Resolution

##### Frequency response

#### Picture performance

##### Color temperature

##### Line pull range

##### Overscan

##### Zooming

9300K/6500K (standard)/3200K  
switchable  
Horizontal :  $\pm 500$  Hz  
Vertical : -8 Hz  
7% preset ( $\pm 3\%$  variable)  
Within 5%

- Continued on next page -

TRINITRON® COLOR VIDEO MONITOR  
**SONY®**



# Inputs and Outputs

VIDEO IN	BNC connector 1 Vp-p, sync negative 75-ohm (auto), loop through
Y/C IN	4-pin mini DIN connector Y : 1 Vp-p, sync negative C : 0.286 Vp-p (burst signal) (NTSC) 0.3 Vp-p (PAL) 75-ohm (auto), loop through
AUDIO IN (L, R)	Phono jack -5 dBs high impedance, loop through
R/R-Y, G/Y, B/B-Y IN	BNC connector R, G, B channels : 0.714 Vp-p./non-composite, 75-ohm terminated (525 lines) 0.7 Vp-p./non composite, 75-ohm terminated (625 lines) 1 Vp-p./composite, 75-ohm terminated Y channel : 1.0 Vp-p./composite, 75-ohm terminated 0.7 Vp-p./non composite, 75-ohm terminated R-Y, B-Y channels : 0.7 Vp-p, 75-ohm terminated
Sync input	BNC connector H (or composite) SYNC, V SYNC, 0.5 - 5 Vp-p, 75-ohm terminated
Speaker output	8-16 ohm, 7 W + 7 W

## (CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

## WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.  
 THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

## SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK  $\Delta$  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

# General

Power requirements	PVM-2950Q 100 - 120 V AC, 50/60 Hz, MAX. 3.7 A PVM-2950QM 220 - 240 V AC, 50/60 Hz, MAX. 1.2 A
Operating temperature range	0 - 35° C (32 - 95° F)
Dimensions	687×538×529 mm (w/h/d) (27 1/8×21 1/4×20 7/8 inches)
Mass	52 kg (114 lb 10 oz)
Supplied accessories	AC power cord (1) AC plug holder (1) Remote commander RM-854 with a battery (1)
Optional accessories	
Speaker system	SS-X6A
TV tuner	ST-92TV (USA only)

Design and specifications are subject to change without notice.

## (ATTENTION)

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

## ATTENTION!!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHASSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISE LORS DE TOUT DEPANNAGE.  
 LE CHASSIS DE CE RECEPTEUR EST DIRECTEMENT RACCORDE A L'ALIMENTATION SECTEUR.

## ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

LES COMPOSANTS IDENTIFIES PAR UNE TRAME ET PAR UNE MAPQUE  $\Delta$  SUR LES SCHEMAS DE PRINCIPE, LES VUES EXPLOSEES ET LES LISTES DE PIECES CONT D'UNE IMPORTANCE CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMERO DE PIECE EST INDIQUE DANS LE PRESENT MANUEL OU DANS DES SUPPLEMENTS PUBLIES PAR SONY. LES REGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRESENT MANUEL. SUIVRE CES PROCEDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTE.

## SAFETY CHECK-OUT ( US model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer :

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the condition of the monopole antenna (if any). Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
8. Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
9. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

### HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

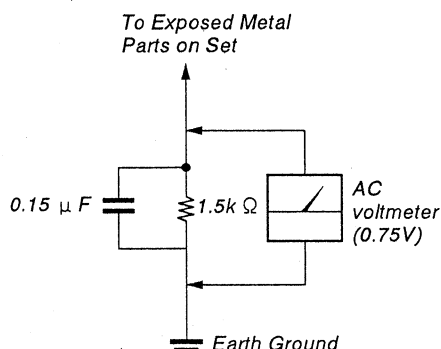


Fig. A. Using an AC voltmeter to check AC leakage.

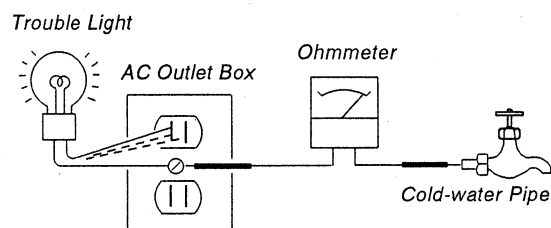


Fig B. Checking for earth ground.

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## SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

# Features

### Trinitron picture tube

The Trinitron picture tube provides a flat and high resolution picture. Horizontal resolution is more than 600 TV lines at the center of the picture.

### Four color systems available

The monitor can display NTSC, PAL\*, SECAM, NTSC<sub>4.43</sub>\*\* signals. The appropriate color system is selected automatically.

\* If you set PAL to ON in the menu, the monitor can also display the PAL60 signal.

\*\* The NTSC<sub>4.43</sub> signal is used for playing back NTSC recorded video cassettes with a video tape recorder/ player especially designed for use with this system.

### Index number

You can operate a specific monitor among several monitors by using the index number features.

### On-screen menus

You can adjust the settings by using the on-screen menus.

### Control S

The CONTROL S signal allows remote control of several monitors and a VCR through a single monitor.

### Blue only mode

In this mode, only a blue signal is displayed on the screen turning off the red and green signals. This facilitates color saturation and phase adjustments.

### RGB/component input connectors

RGB or component (Y,R-Y,B-Y) signals from video equipment can be input through these connectors.

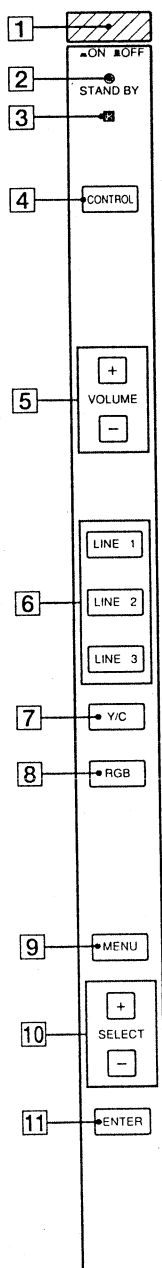
### Y/C input connector

The video signal, split into the chrominance signal (C) and the luminance signal (Y), can be input through this connector, eliminating the interference between the two signals, which tends to occur in a composite video signal, assuring video quality.

This manual covers PVM-2950Q and PVM-2950QM. The model number is located on the rear.  
The operating procedures of all models are the same.

# Location and function of parts and controls

## Front panel



- 1 POWER switch**  
Press to turn the monitor on. Press again to turn it off.
- 2 STANDBY indicator**  
Lights up when the monitor is turned off with the remote commander.
- 3 Remote sensor**  
Receives the beam from the remote commander.
- 4 CONTROL key**  
To operate the keys on the front panel, first press this key. Then the keys light up or flash that shows they can be operated. Press again to deactivate them.
- 5 VOLUME +/- keys**  
Press to obtain the desired volume.
- 6 LINE 1, LINE 2, LINE 3 keys\***  
Press to select the line inputs.
- 7 Y/C key\***  
Press to select the Y/C input of LINE 1 or LINE 2.
- 8 RGB key\***  
Press to select the RGB input of LINE 3.
- 9 MENU key**  
Press to make the menu appear or to go to the following menu.
- 10 SELECT +/- key**  
Press to move the cursor (▶) to an item or to adjust value in a menu.
- 11 ENTER key**  
Press to select the desired item in a menu.

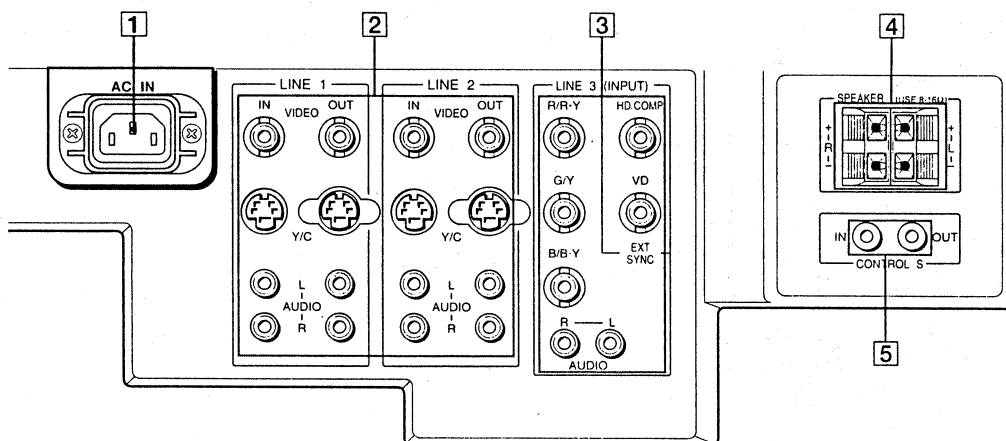
\* Each key acts as follows.

CONTROL	On	Off
Selected key	Flash	Light up
Not selected key	Light up	Light off

### Note

If the picture disappears suddenly and the STANDBY indicator flashes, there may be a failure in the monitor. Unplug the unit and call your authorized Sony dealer.

## Rear panel



### 1 AC IN socket

Connect the supplied AC power cord to this socket and to a wall outlet.

### 2 LINE 1, LINE 2 connectors

#### VIDEO IN (BNC)

Connect to the video output of video equipment, such as a VCR or a color video camera. For a loop-through connection, connect to the video output of another monitor.

#### VIDEO OUT (BNC)

Loop-through output of the VIDEO IN connector.

Connect to the video input of a VCR or another monitor.

#### Y/C IN (4-pin mini DIN)

Connect to the Y/C separate output of a video camera, VCR or other video equipment.

#### Y/C OUT (4-pin mini DIN)

Loop-through output of the Y/C IN connector. Connect to the Y/C separate input of a VCR or another monitor.

#### AUDIO IN (phono)

Connect to the audio output of a VCR or to a microphone via a suitable microphone amplifier. For a loop-through connection, connect to the audio output of another monitor.

#### AUDIO OUT (phono)

Loop-through output of the AUDIO IN jack. Connect to the audio input of a VCR or another monitor.

### 3 LINE 3 connectors

#### R/R-Y IN, G/Y IN, B/B-Y IN (BNC)

When the RGB input is selected (RGB key on the front panel is lit), connect to the RGB signal outputs of a video camera. When the R-Y, G-Y, B-Y input is selected (RGB key is not lit), connect to the R-Y/Y/B-Y component signal outputs of a Sony Betacam video camera.

#### HD/COMP (BNC)

Connect to the H sync signal or composite sync signal output.

#### VD (BNC)

Connect to the V sync signal output.

#### Note

External sync signal is selected automatically. See the priority chart below.

Input connector	Input sync signals		
HD/COMP	H Sync	Comp Sync	—
VD	V Sync	—	—
G	Sync on G	Sync on G	Sync on G
Sync signals to be selected	H Sync V Sync	Comp Sync	Sync on G

#### AUDIO IN (phono)

Connect to the audio output of a VCR.

### 4 SPEAKER L/R terminals

Connect to speakers with 8 to 16 ohms impedance.

#### Note

Do not connect the speaker's cord to the monitor and to an amplifier simultaneously, or an excessive electric current might flow from the amplifier and damage the monitor.

### 5 CONTROL S IN/OUT connectors

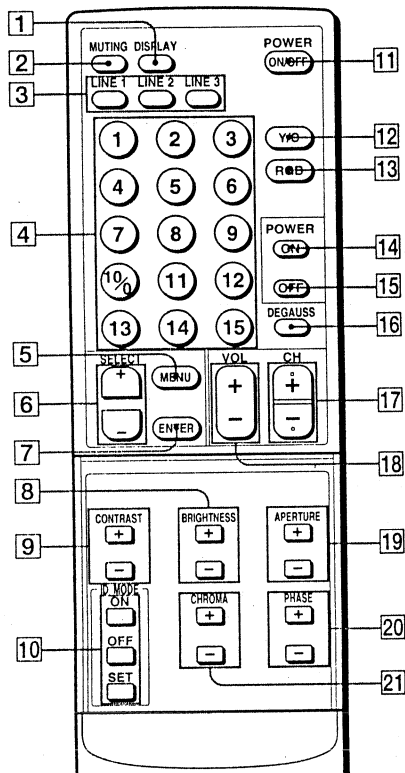
Connect to the CONTROL S connectors of a VCR or several monitors. Then you can control the system with a single remote commander.

#### Note

If you connect CONTROL S IN to the other equipment's CONTROL S OUT connector, you cannot operate the monitor with the supplied remote commander.

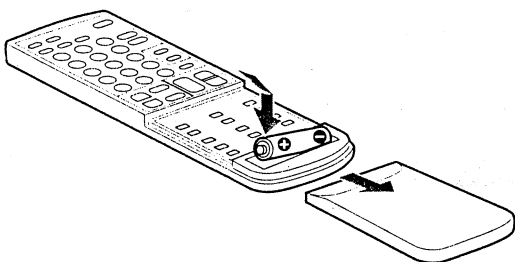
## Location and function of parts and controls (continued)

### Remote commander



### Installing battery

Insert a size AA (R6) battery in correct polarity.



### Notes

- In normal operation, a battery will last up to half a year. If the remote commander does not operate properly, the battery might be exhausted. Replace it with new one.
- To avoid damage from possible battery leakage, remove the battery if you do not plan to use the remote commander for a fairly long time.

- 1 DISPLAY button**  
Press to display the color system and the selected line input.
- 2 MUTING button**  
Press to mute the sound.
- 3 LINE 1/LINE 2/LINE 3 buttons**  
Press to choose the line input.
- 4 Number buttons**  
Press to select the index number. Cannot use the 11 to 15 buttons with the monitor.
- 5 MENU button**  
Press to make the menu appear or to go to the following menu.
- 6 SELECT +/- buttons**  
Press to move the cursor (▶) to an item or to adjust value in a menu.
- 7 ENTER button**  
Press to select the desired item in a menu.
- 8 BRIGHTNESS +/- buttons**  
Press the + button to make the picture brighter or the - button to make it darker.
- 9 CONTRAST +/- buttons**  
Press the + button to increase the contrast or the - button to decrease it.
- 10 ID MODE buttons**  
Press ON to make an index number appear on the screen. Then press the index number of the monitor you want to operate and press SET. After you finish the operation, press OFF to return to the normal mode.
- 11 POWER ON/OFF button**  
Press to turn on the monitor. Press again to turn it off.
- 12 Y/C button**  
Press to select the Y/C input of LINE 1 or LINE 2.
- 13 RGB button**  
Press to select the RGB input of LINE 3. If you do not press this button (RGB key is not lit), the component input is selected on LINE 3.
- 14 POWER ON button**  
Press to turn on the monitor. Use this button instead of the POWER ON/OFF button when you do not want to let another monitor be affected.
- 15 POWER OFF button**  
Press to turn off the monitor. Use this button instead of the POWER ON/OFF button when you do not want to let another monitor be affected.

## Power sources

### 16 DEGAUSS button

Press to demagnetize the screen. Wait for 10 minutes or more before activating this feature again. The same interval is needed after turning on the monitor.

### 17 CH +/- buttons

(Cannot use these buttons with the monitor.)

### 18 VOL +/- buttons

Press to obtain the desired volume.

### 19 APERTURE +/- buttons

Press the + button for more sharpness or the - button for less sharpness. (This adjustment has no effect on the pictures of RGB signals.)

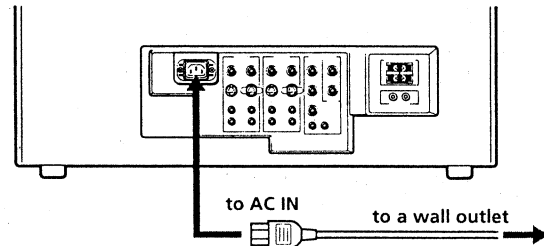
### 20 PHASE +/- buttons

Press the + button to make the skin tones greenish or the - button to make them purplish. (NTSC signal only)

### 21 CHROMA +/- buttons

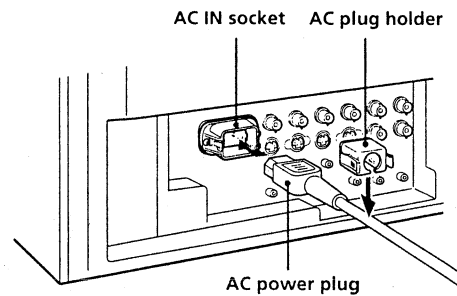
Press the + button to increase the color intensity and the - button to decrease it. (This adjustment has no effect on the pictures of RGB signals.)

Connect the AC power cord (supplied) to the AC IN socket and to a wall outlet.

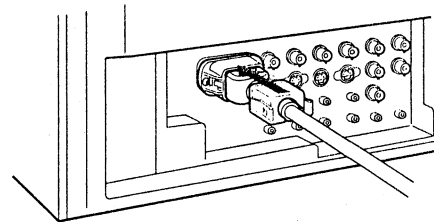


### To connect an AC power cord securely with an AC plug holder

- 1 Plug the power cord into the AC IN socket. Then, attach the AC plug holder (supplied) to the AC power cord.



- 2 Slide the AC plug holder over the cord until it connects to the attached holder.



### To remove the AC power cord

Squeeze the left and right sides and pull out the AC plug holder.

# Using on-screen menus

## Operating through menus

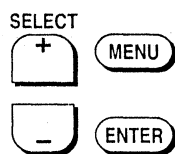
There are four buttons (keys) on the monitor and the remote commander for menu operations.

To display a menu, first press MENU. Press + or - to move the cursor (►) and press ENTER to select an item.

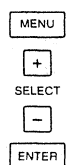
To return to the normal screen, press the selected line input button (key).

## Menu operating buttons

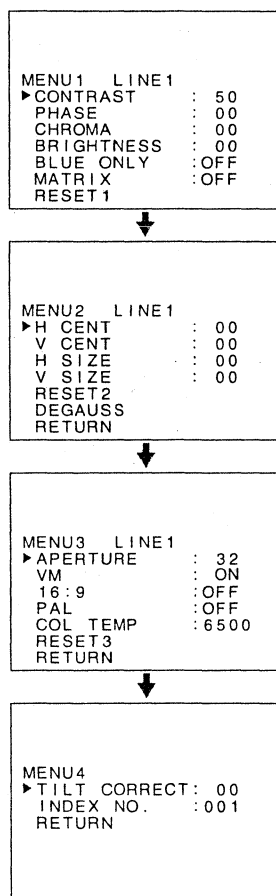
Remote commander



Monitor



Each time you press MENU, the screen changes as shown below. For details see the following guide.

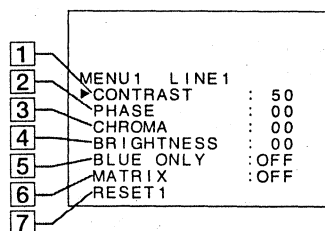


## Menu guide

You can adjust the picture for each line input. Select the line input by pressing the line input button (key) before making adjustments.

The items on Menu 4 are common for all line inputs.

### Menu 1



#### 1 CONTRAST

Press + to increase the contrast and press - to decrease it.

#### 2 PHASE

Press + to make the skin tones greenish and press - to make them purplish. (NTSC signal only)  
(Set MATRIX to OFF when adjusting this item.)

#### 3 CHROMA

Press + to increase the color intensity and press - to decrease it.  
(Set MATRIX to OFF when adjusting this item.)

#### 4 BRIGHTNESS

Press + to make the picture brighter and press - to make it darker.

#### 5 BLUE ONLY

Select ON to turn off the red and green signals. Only a blue signal is displayed on the screen. This facilitates "chroma" and "phase" (NTSC signal only) control adjustments.

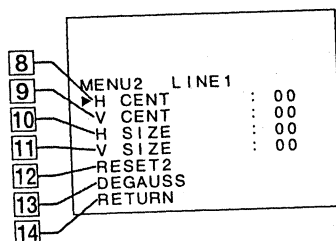
#### 6 MATRIX

Select ON to activate the matrix circuit that may correct skin tones. (NTSC signal only)

#### 7 RESET1

Select to restore the factory settings in MENU 1.

## Menu 2



### 8 H CENT

Adjusts the horizontal centering. Press + to move the picture to the right and press - to move it to the left.

### 9 V CENT

Adjusts the vertical centering. Press + to move the picture up and press - to move it down.

### 10 H SIZE

Adjusts the horizontal picture size. Press + to enlarge the horizontal size and press - to diminish it.

### 11 V SIZE

Adjusts the vertical picture size. Press + to enlarge the vertical size and press - to diminish it.

### 12 RESET2

Select to restore the factory settings in MENU 2.

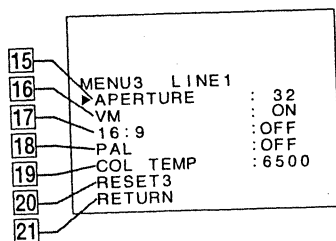
### 13 DEGAUSS

Select to demagnetize the screen. Wait for 10 minutes or more before activating this feature again. The same interval is needed after turning on the monitor.

### 14 RETURN

Select to return to the MENU 1 screen.

## Menu 3



### 15 APERTURE

Adjusts the picture sharpness. Press + for more sharpness or press - for less sharpness. (This adjustment has no effect on the pictures of RGB signals.)

### 16 VM

Select ON to emphasize sharpness and to reproduce a clear picture. (This adjustment has no effect on the pictures of RGB signals.)

### 17 16:9

Select ON for a 16:9 picture signal.

### 18 PAL

Select ON when the monitor does not recognize the PAL signal. (You must select ON when the PAL60 signal is input.)

### 19 COL TEMP

Select the color temperature from among 9300K, 6500K and 3200K.

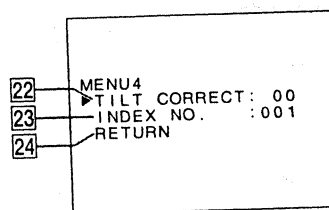
### 20 RESET3

Select to restore the factory settings in MENU 3.

### 21 RETURN

Select to return to the MENU 2 screen.

## Menu 4



### 22 TILT CORRECT

Adjusts the picture tilt due to the influence of the earth's magnetism. Press + to rotate the picture clockwise and press - to rotate it counterclockwise.

### 23 INDEX NO.

Sets the index number of the monitor. You cannot set the number with the remote commander. Use the keys on the monitor. For more information about the index number, see "Operating a specific monitor with the remote commander."

### 24 RETURN

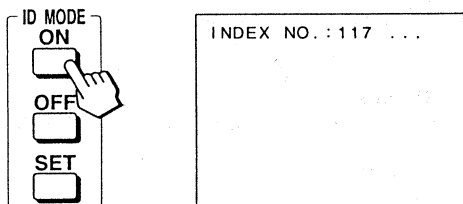
Select to return to the MENU 3 screen.

# Operating a specific monitor with the remote commander

By following procedure, you can operate a specific monitor with the remote commander without affecting other monitors that are installed together.

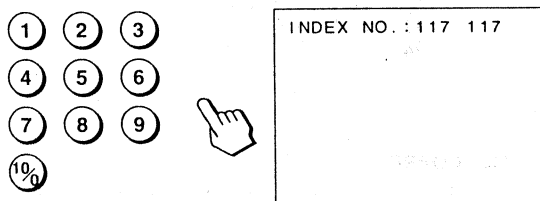
## 1 Press ID MODE ON on the remote commander.

Monitor index numbers appear in white characters on all the monitors. (Every monitor has its own index number from 1 to 255 as factory preset.)



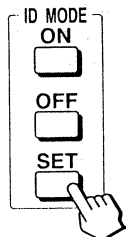
## 2 Input the index number of the monitor you want to operate using 0 – 9 buttons of the remote commander.

The input number appears right next to each monitor's own index number.



## 3 Press ID MODE SET.

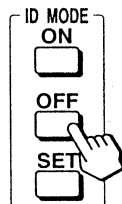
The character on the selected monitor changes to cyan while others change to red.



Now you can operate only a specified monitor. (All operations available in ID mode except POWER ON/OFF.)

## 4 After necessary adjustment, press ID MODE OFF.

The monitor returns to the normal mode.



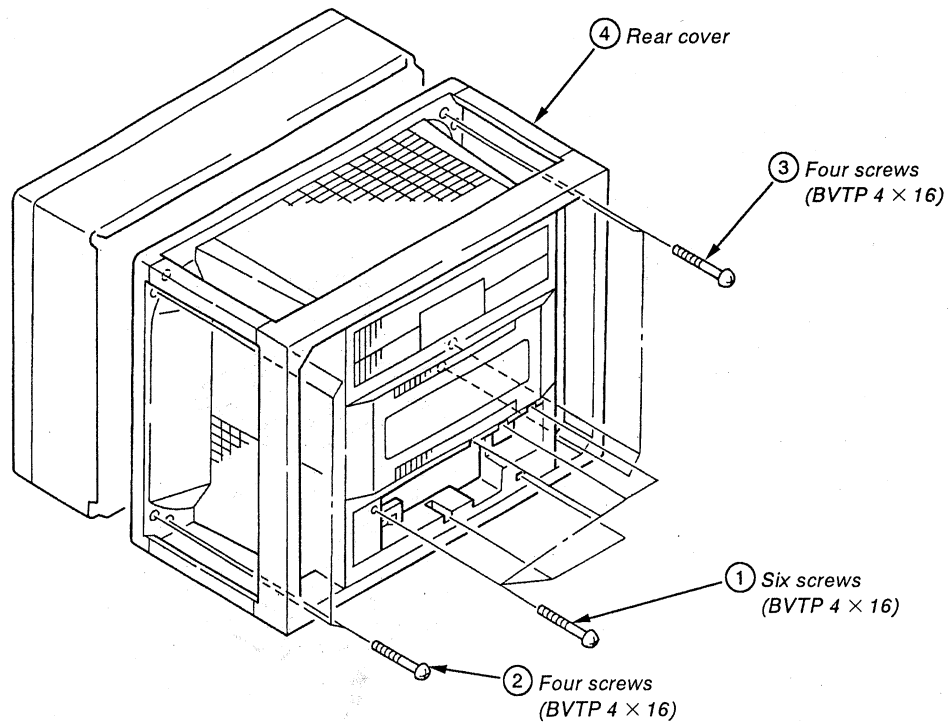
## To change the index number

You can change the index number if necessary. You cannot change the number with the remote commander. Use the keys on the monitor.

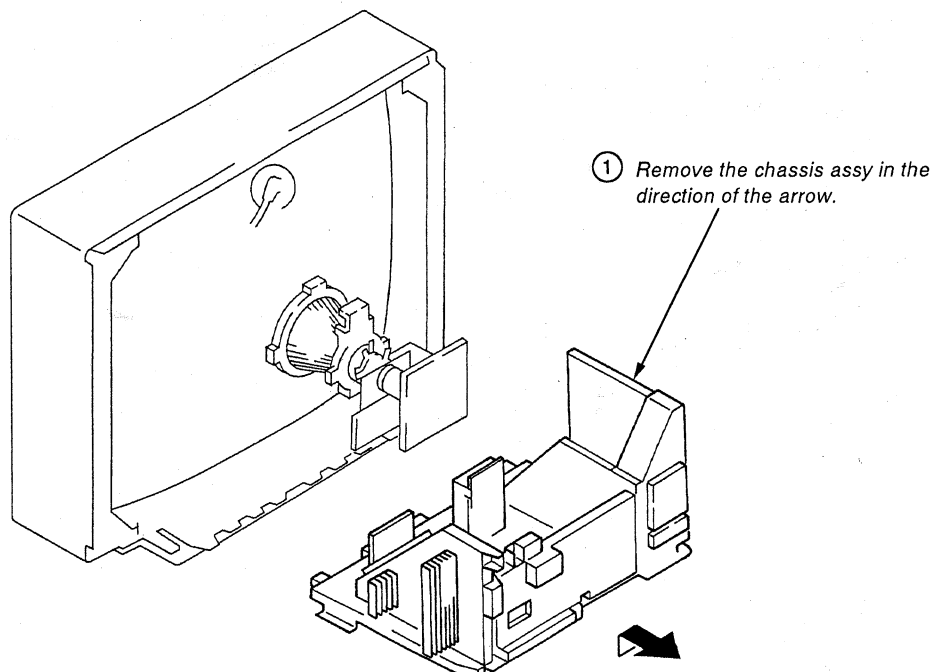
- 1 Display MENU 4 screen with pressing the MENU button.
- 2 Select INDEX NO. and press ENTER.
- 3 Select the index number with the SELECT +/- buttons and press ENTER.

## SECTION 2 DISASSEMBLY

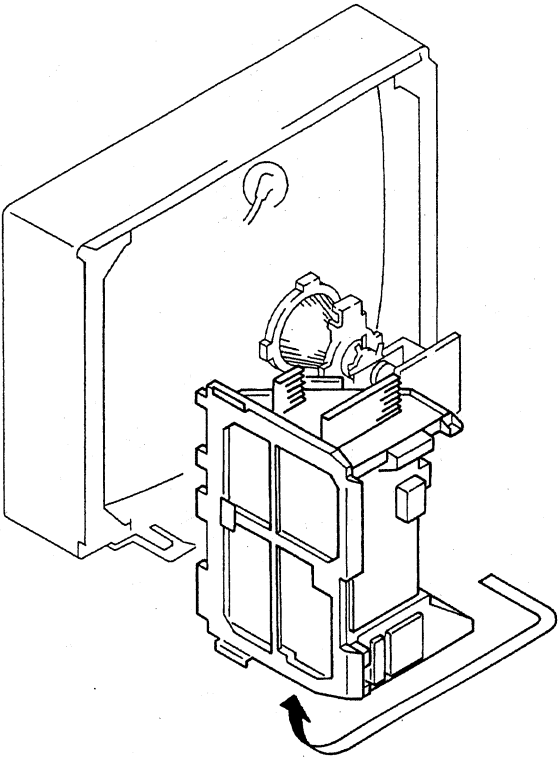
### 2-1. REAR COVER REMOVAL



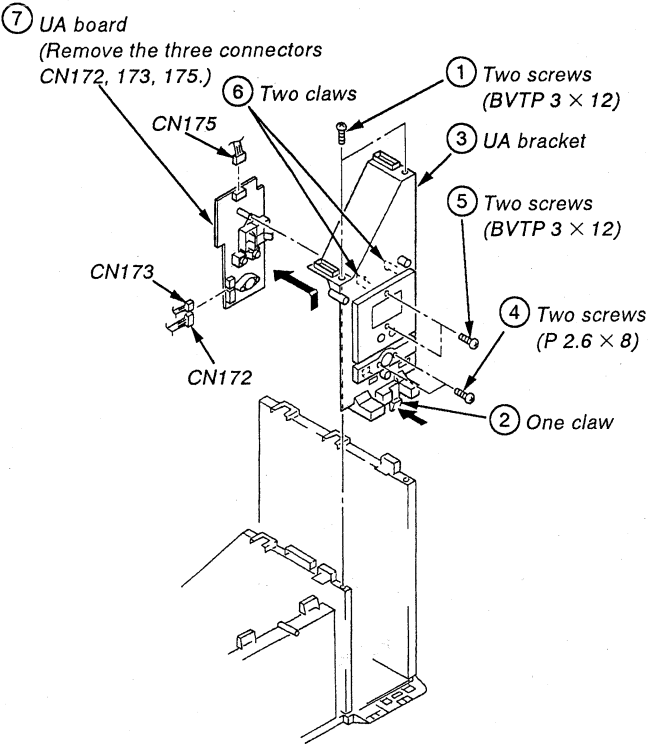
### 2-2. CHASSIS ASSY REMOVAL



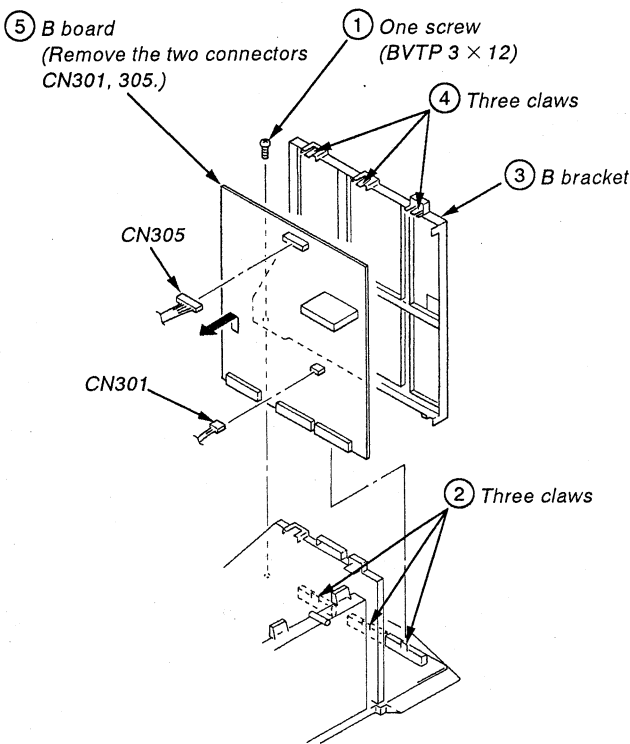
2-3. SERVICE POSITION



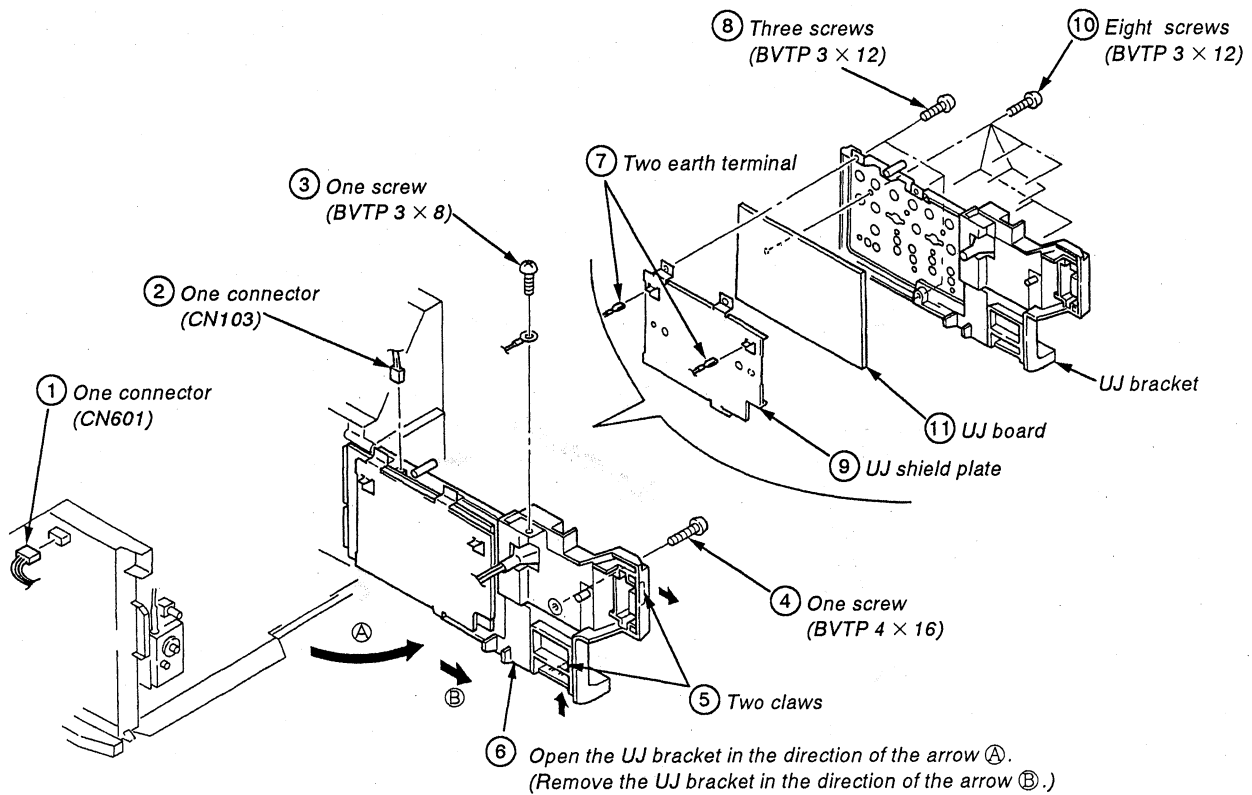
2-4. UA BOARD REMOVAL



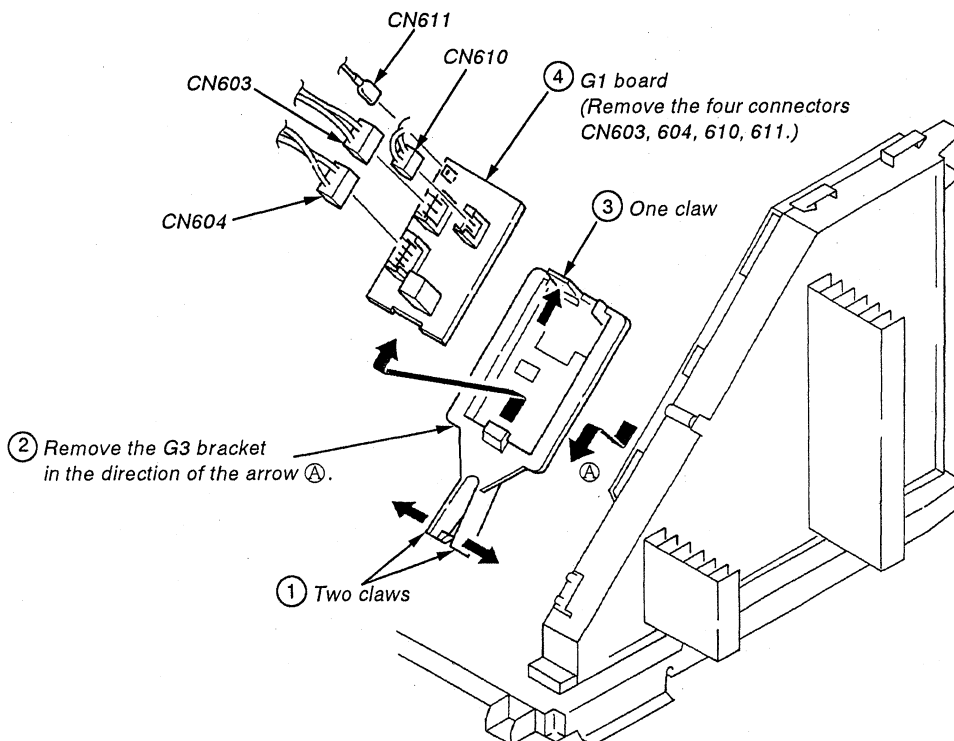
2-5. B BOARD REMOVAL



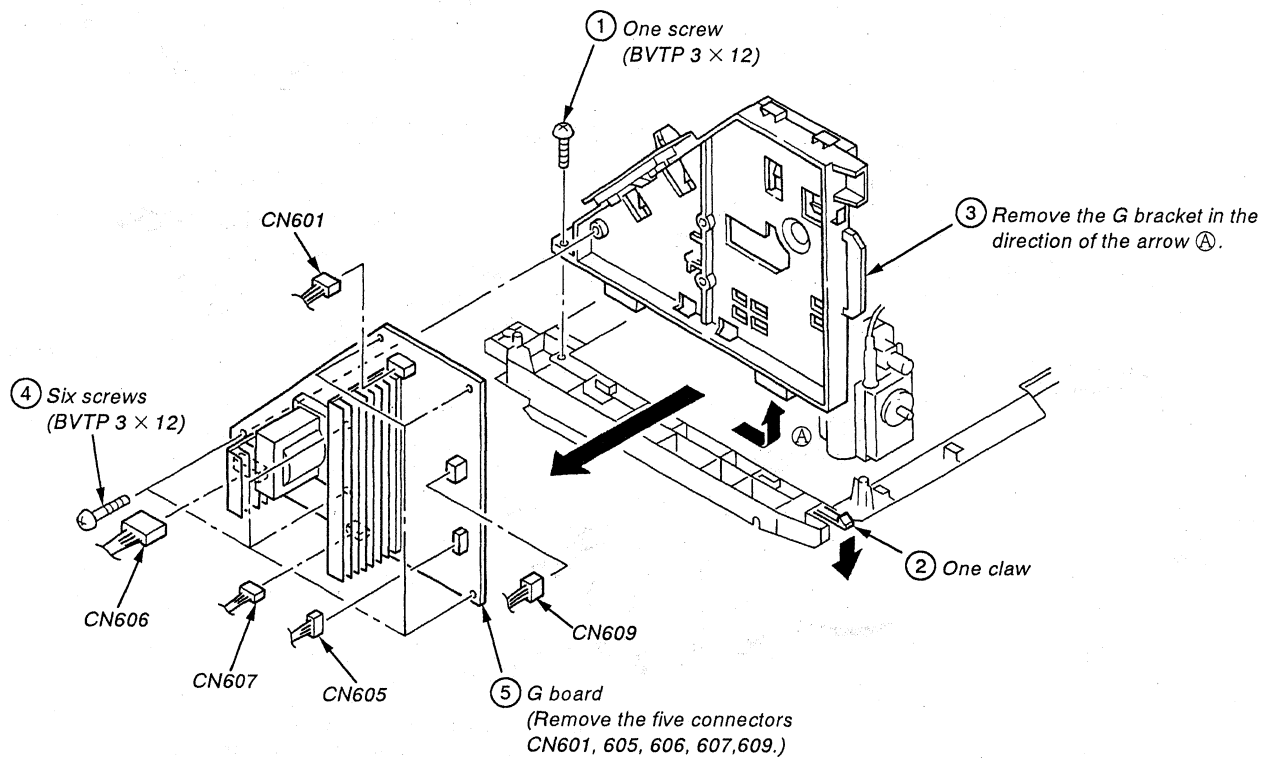
## 2-6. UJ BOARD REMOVAL



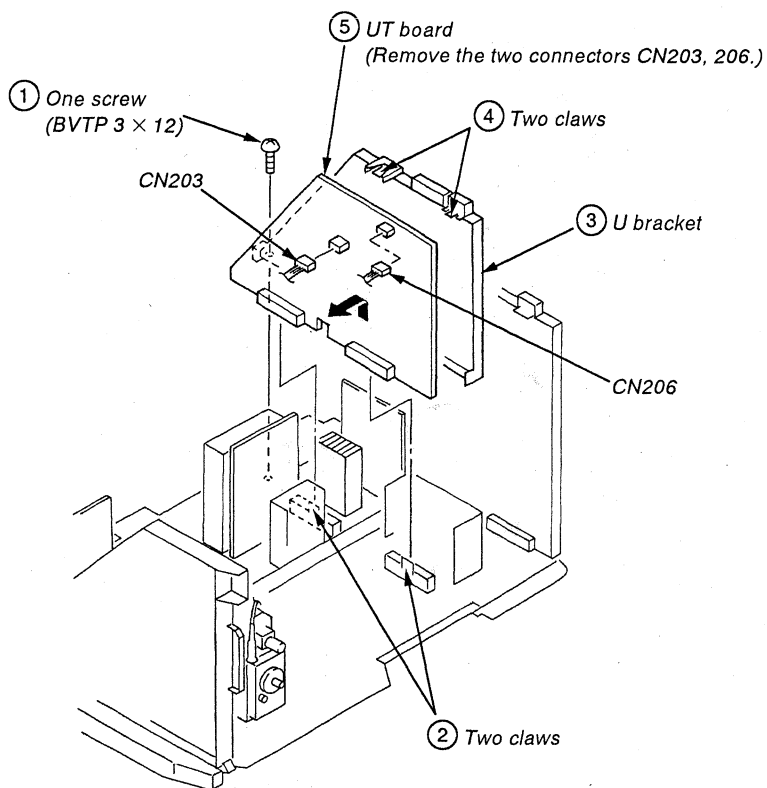
## 2-7. G1 BOARD REMOVAL



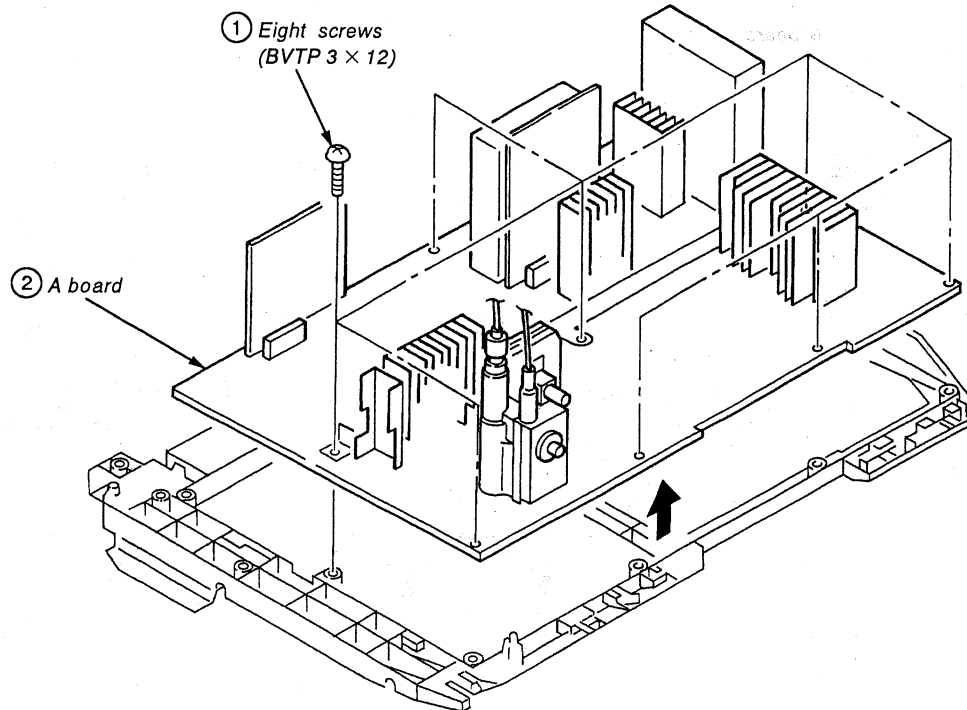
## 2-8. G BOARD REMOVAL



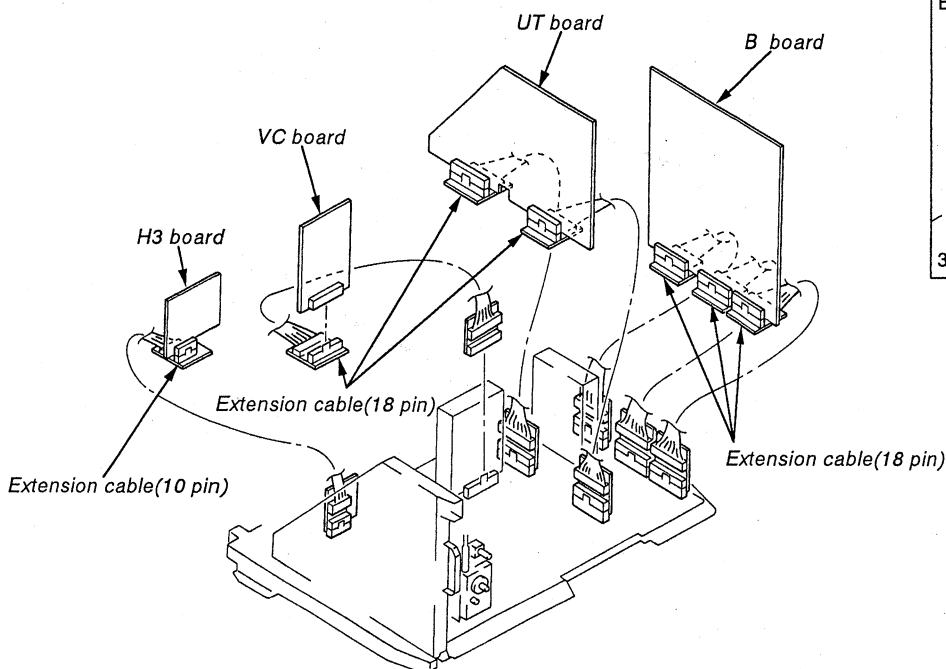
## 2-9. UT BOARD REMOVAL



## 2-10. A BOARD REMOVAL

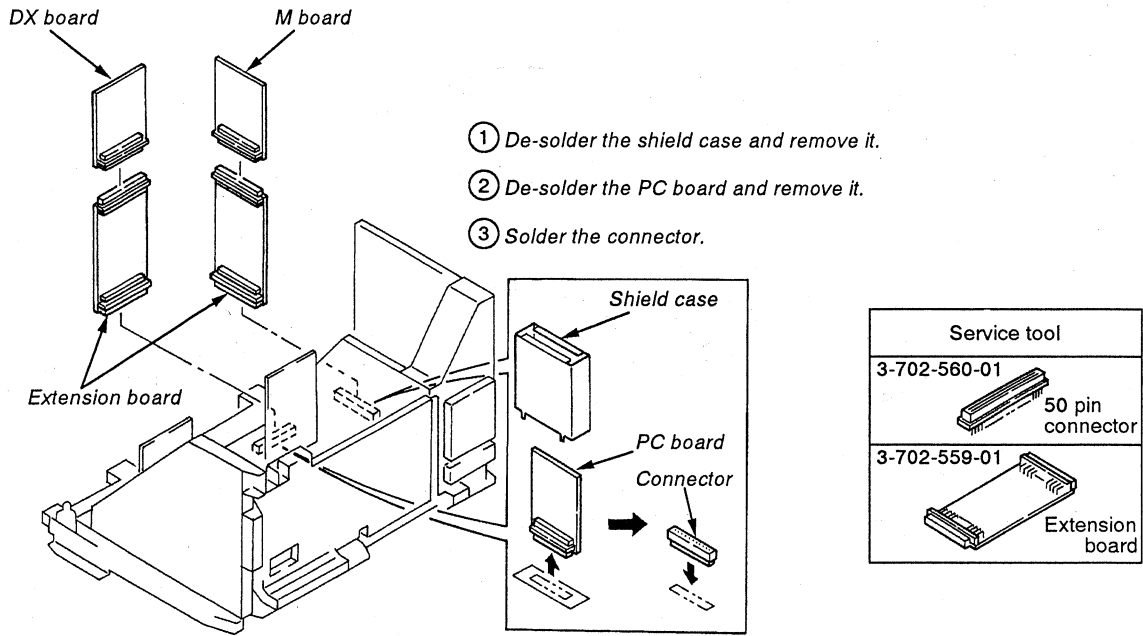


## 2-11. EXTENSION CABLE

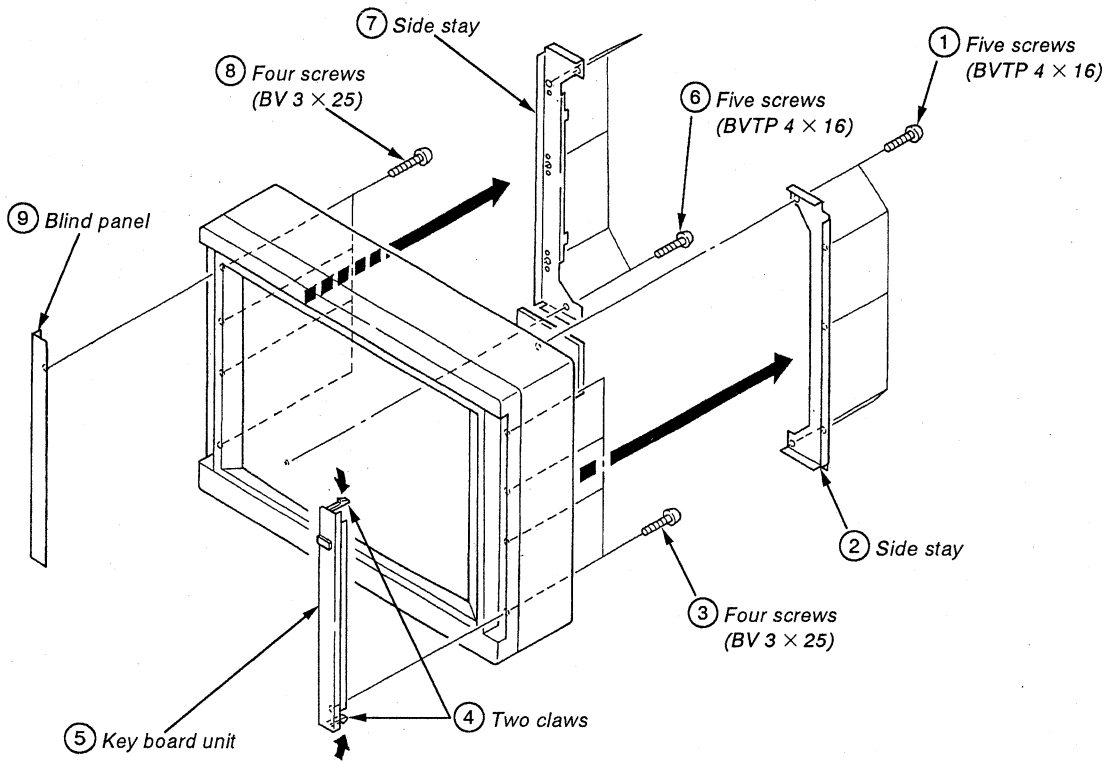


Service tool	
Extension cable	18 pin
3-702-558-01	
	10 pin
3-702-557-01	

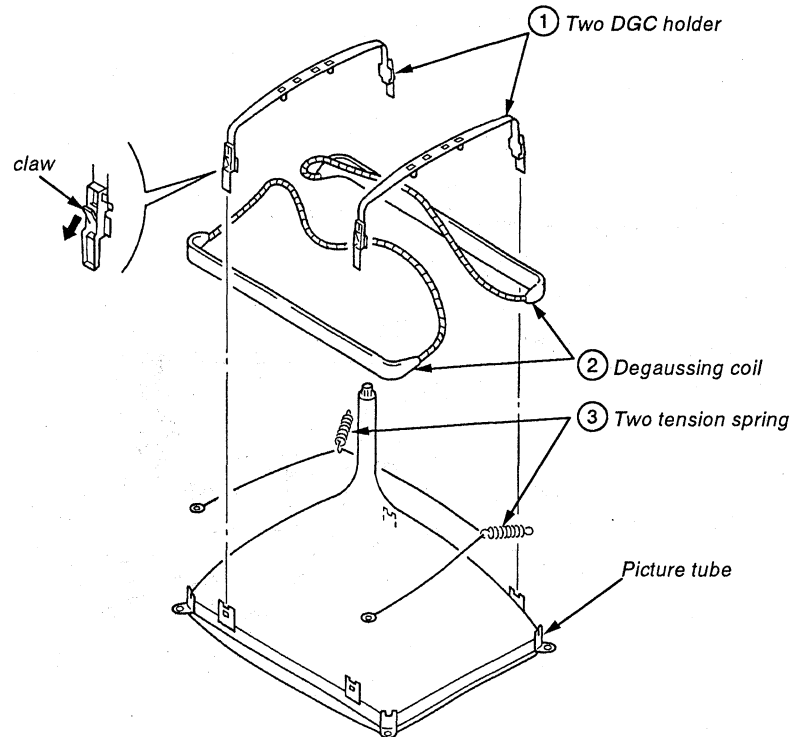
2-12. EXTENSION BOARD



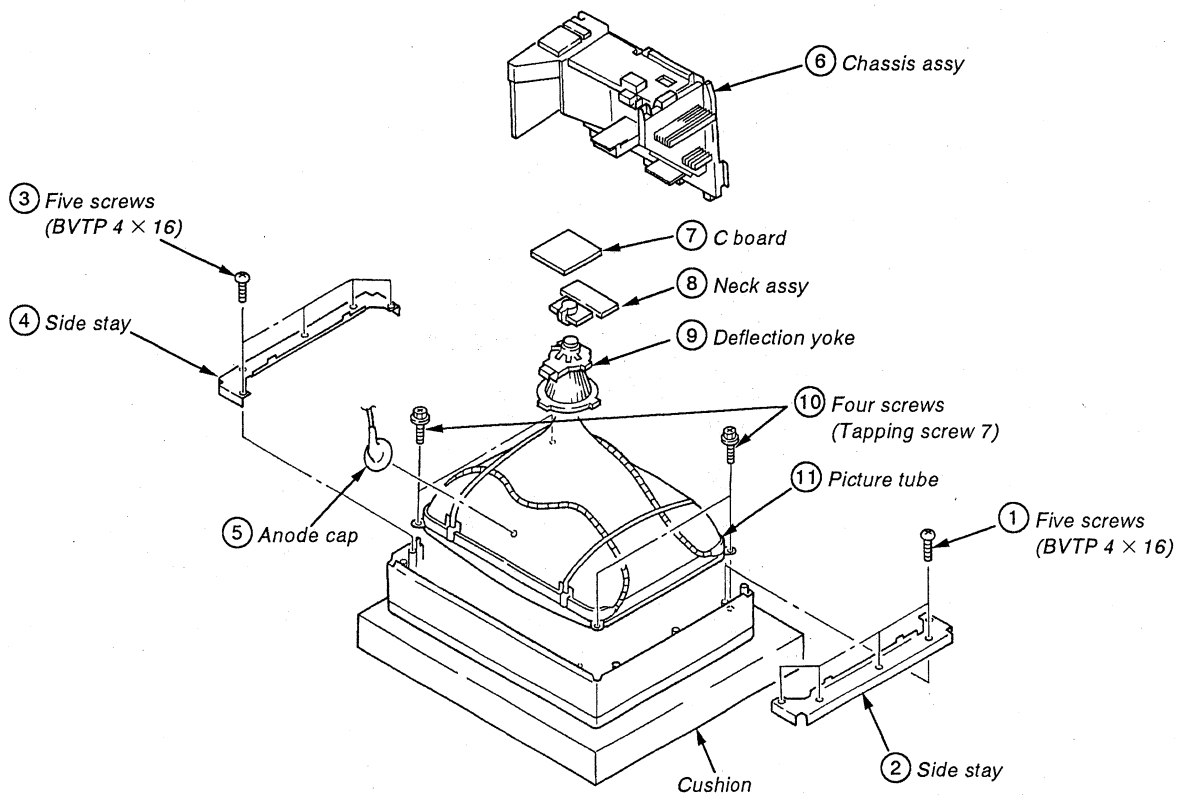
2-13. KEY BOARD UNIT AND BLIND PANEL REMOVAL



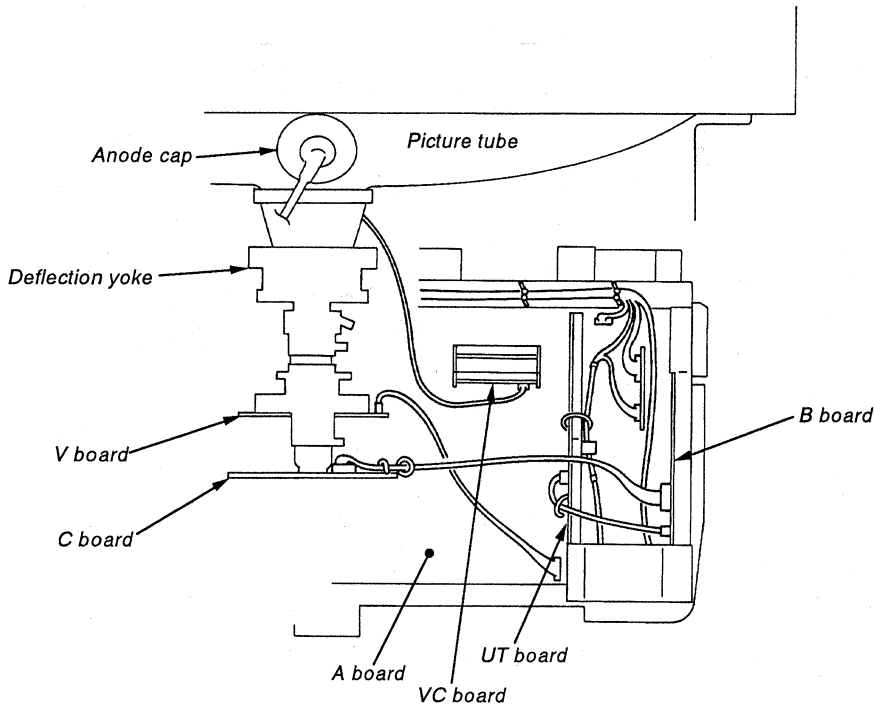
## 2-14. DEGAUSSING COIL REMOVAL



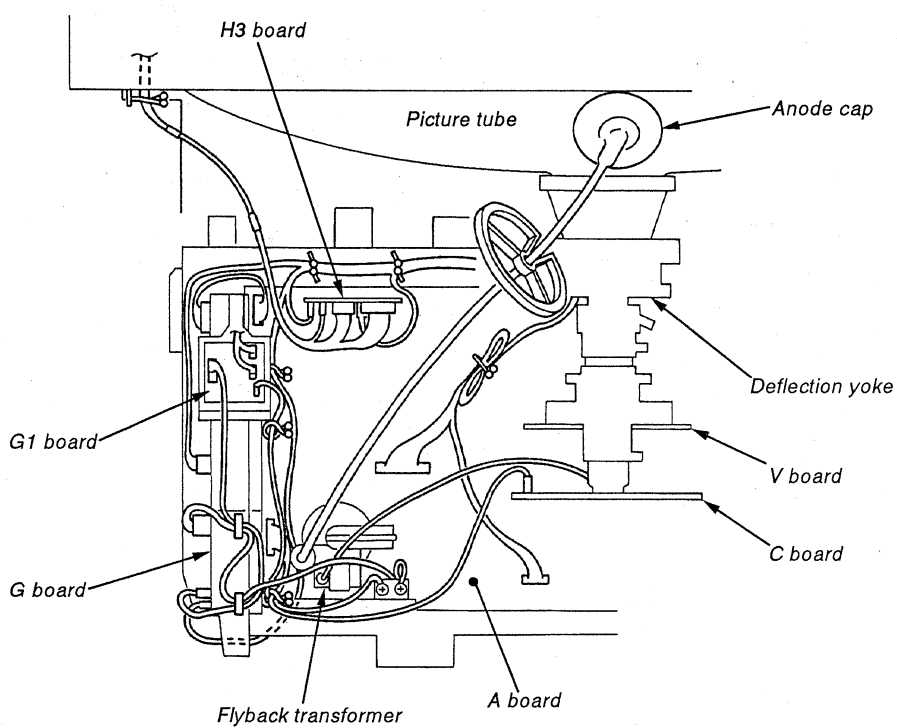
## 2-15. PICTURE TUBE REMOVAL



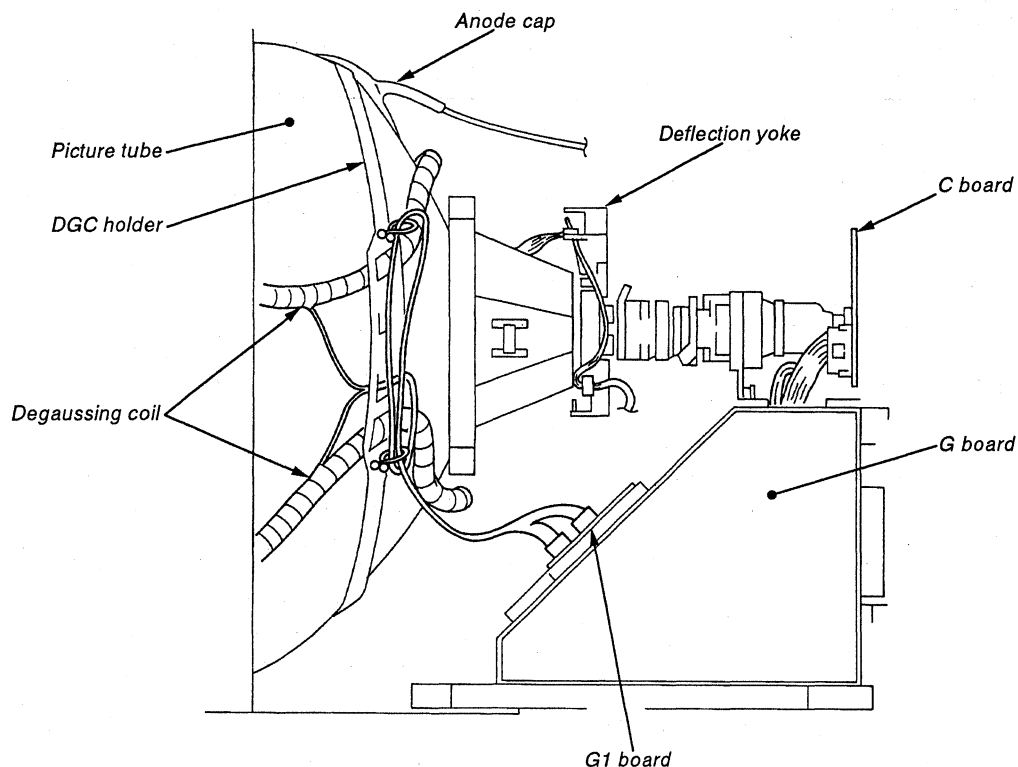
2-16. HARNESS LOCATION  
(1)TOP VIEW(RIGHT)



(2)TOP VIEW(LEFT)



### (3) LEFT SIDE VIEW



#### • REMOVAL OF ANODE-CAP

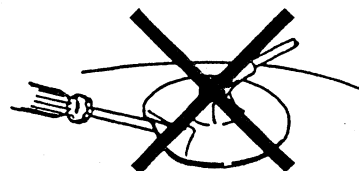
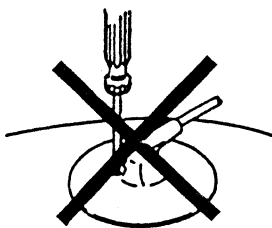
**Note:** Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield, or carbon painted on the CRT, after removing the anode.

#### • REMOVING PROCEDURES

- 
- ① Turn up one side of the rubber cap in the direction indicated by the arrow ①.
  - ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ②.
  - ③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ③.

#### • HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material !
- ② Don't press the rubber hardly not to hurt inside of anode-caps !  
A metal fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardly !  
The shatter-hook terminal will stick out or hurt the rubber.



## SECTION 3 SET-UP ADJUSTMENTS

- Carry out the following adjustments when readjustment is required or when attaching a new picture tube.
- These adjustments should be carried out at rated power supply voltage unless otherwise specified.

Controls and switches should be set in standard position as listed below unless otherwise specified.

Contrast ..... Standard  
Brightness ..... Standard

Carry out adjustments in the following order.

- 3-1 Landing adjustment (Beam Landing)
- 3-2 Convergence adjustment
- 3-3 Focus adjustment
- 3-4 White balance adjustment

Note: Instruments used

1. Color bar/pattern generator
2. Degausser

### 3-1. BEAM LANDING

#### Preparations

1. Face the picture tube screen of the set in an eastward or westward direction to reduce the influence of earth magnetism.
2. Turn the power switch on the set to ON to carry out demagnetizing.

#### (1) Adjustment of the Y separation axis correction magnet.

1. Receive the image of the crosshatch.
2. Adjust the picture to minimum and the brightness to standard.
3. Secure the neck assembly to the position shown in the figure (Fig. 3-2).
4. Move the DY until it comes in contact with the CRT and set it in a upright position.
5. Open and close the Y separation axis correction magnet on the neck assembly until there is up-down symmetry and adjust so that the upper and lower pins are symmetrical.
6. Return the DY to the original position.

#### (2) Landing

1. Receive the all-white signal of the pattern generator, adjusting the picture to maximum and the brightness to a level that is easy to view.
2. Carry out rough adjustment of the focus and horizontal convergence.
3. Loosen the retention device on the deflection yoke and adjust the purity adjustment knob in the center (Fig. 3-1).
4. Switch the pattern generator to the single color green.
5. Slide the deflection yoke to the back so that the center of the screen is green and use the purity magnet to achieve left-right symmetry (Fig. 3-3).
6. Slide the deflection yoke to the front so that the entire screen is the single color green.
7. Switch the pattern generator to the single colors red and blue and confirm that landing has been obtained.
8. Secure the retention device once the deflection yoke position has been determined.
9. If landing has not been obtained in the corner section, use the magnet to make corrections (Fig. 3-4).

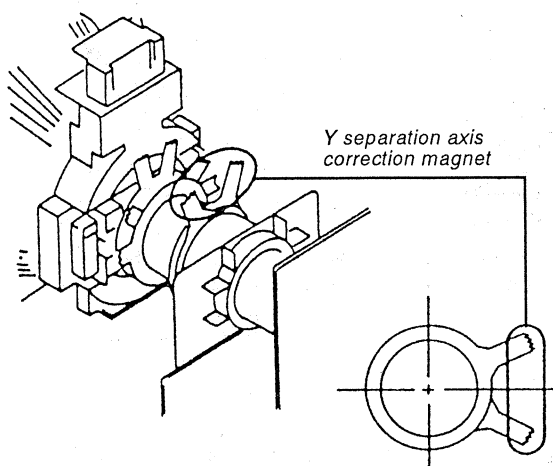
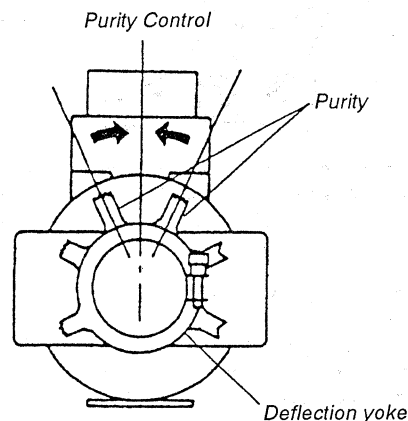


Fig. 3-1



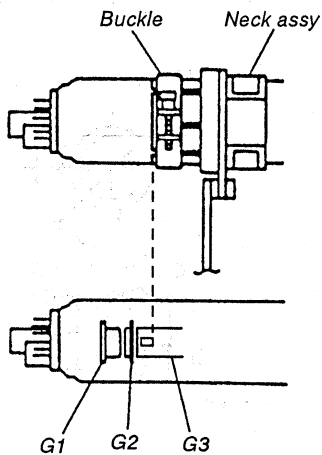


Fig. 3-2

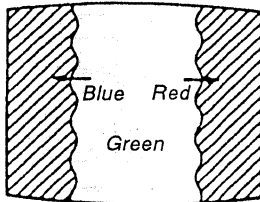


Fig. 3-3

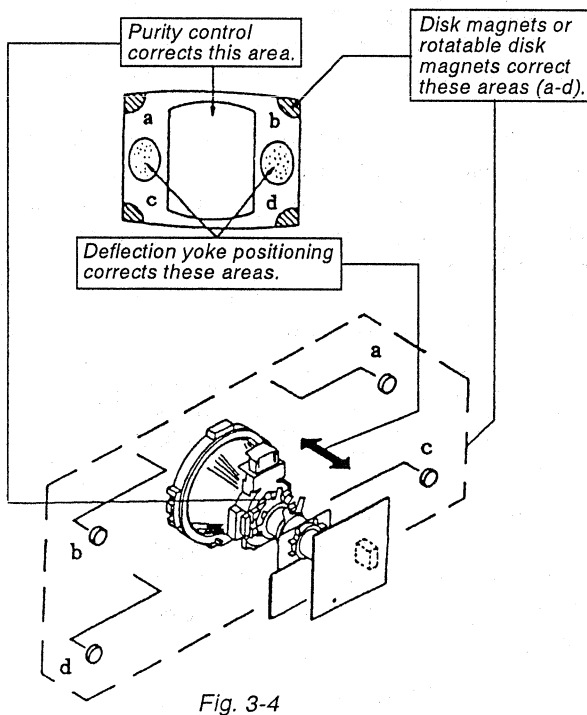


Fig. 3-4

### 3-2. CONVERGENCE ADJUSTMENT

#### (1) Screen Center Convergence Adjustment

(Static Convergence)

1. Receive the dot signal and adjust the picture to standard.
2. Use the horizontal static convergence knob to arrange the red, green and blue dots on top of each other in a horizontal direction in screen center.
3. Use the vertical static convergence magnet to arrange the red, green and blue dots on top of each other in a vertical direction in screen center.

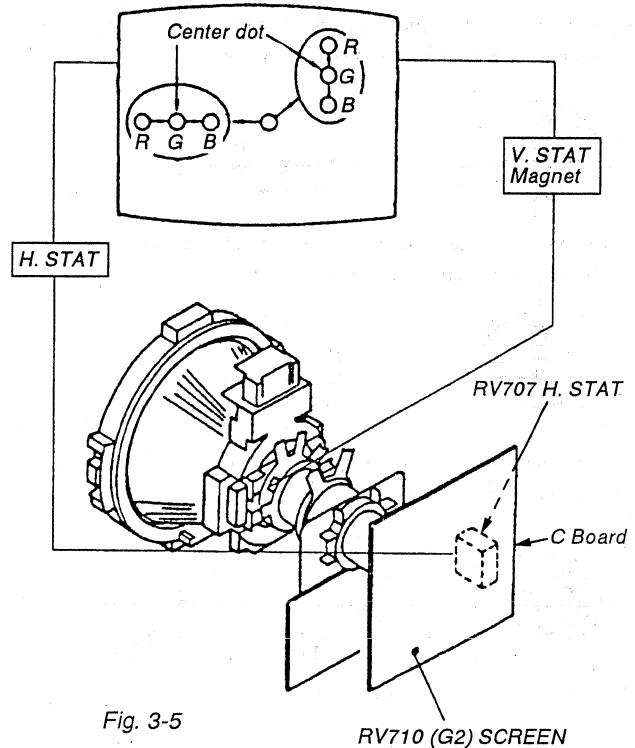


Fig. 3-5

※ If the dots do not become arranged in a horizontal direction within the adjustment range for the horizontal static convergence knob, simultaneously use the vertical static convergence magnet to adjust while taking tracking. (Incline the vertical static convergence and adjust by opening and closing the knob.)

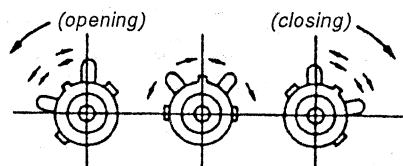


Fig. 3-6

4. Movement of the red, green and blue dots by inclination and opening/closing of the vertical static convergence magnet.
- (1) Movement when opening and closing the vertical static convergence magnet.

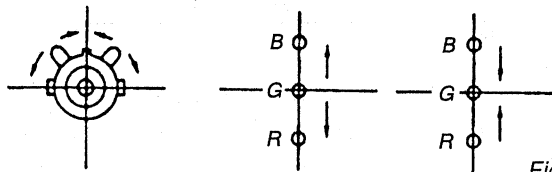


Fig. 3-7

- (2) Movement when inclining the vertical static convergence magnet in a counter-clockwise direction.

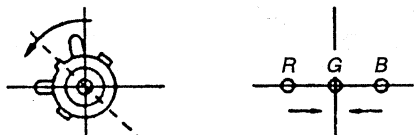


Fig. 3-8

- (3) Movement when inclining the vertical static convergence magnet in a clockwise direction.

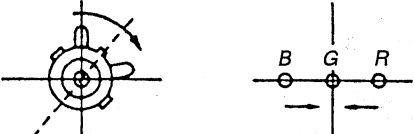


Fig. 3-9

- (4) Movement when inclining the vertical static convergence magnet and opening and closing.

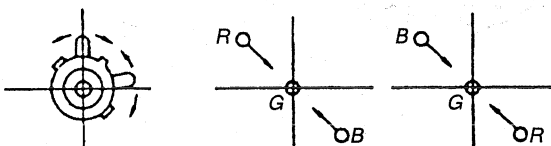


Fig. 3-10

※ If the blue dots do not line up in relation to the red and green dots, correct with the BMC (6-pole) magnet.

5. Correction of HMC (horizontal misconvergence) and VMC (vertical misconvergence) with the BMC (6-pole) magnet.

- (1) HMC correction with the BMC (6-pole) magnet and movement of the electron beam.

HMC correction (A)

HMC correction (B)

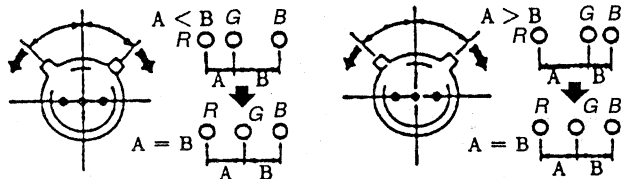


Fig. 3-11

- (2) VMC correction with the BMC (6-pole) magnet and movement of the electron beam.

VMC correction (A)

VMC correction (B)

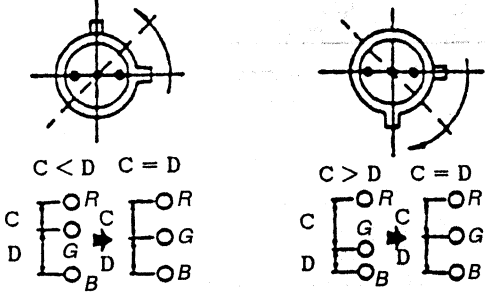


Fig. 3-12

Position of the knob

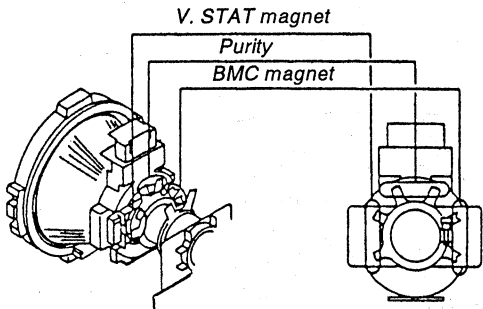


Fig. 3-13

(2) Convergence Adjustment on the Screen Periphery (Dynamic Convergence)

1. Use the horizontal static convergence VR (H.STAT) to adjust the convergence in a horizontal direction in screen center.
2. Change to the service mode and carry out the following dynamic convergence adjustments.

(Service Mode : Use the remote control to press the following buttons in succession : **Screen display** → **CH5** → **Volume +** → **Power** .

please refer to page 27 for selecting the item on how to adjust the dynamic convergence.

	Adjustment Items	Adjustment Range
01	DC SHIFT (H. STAT)	000-063
02	H. AMP	000-063
03	H. TILT	000-063
04	UP. Y. BOW	000-063
05	UP. C. BOW	000-063
06	UP. TILT	000-063
07	LO. Y. BOW	000-063
08	LO. C. BOW	000-063
09	LO. TILT	000-063

3. Press **1** and **4** on the remote control to select the items.  
Adjust with the **3** and **6** buttons.

- 1) Y.BOW adjustment on the upper side of the screen  
(UP.Y.BOW).

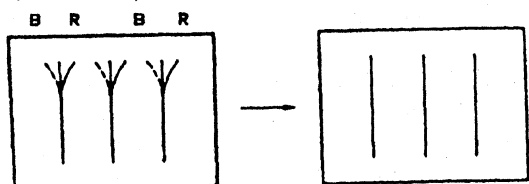


Fig. 3-14

- 2) Y.BOW adjustment on the lower side of the screen  
(LO.Y.BOW)

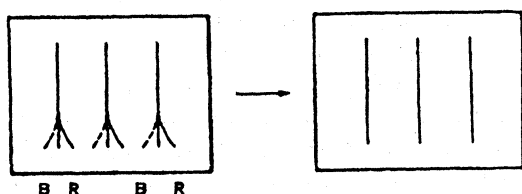


Fig. 3-15

- 3) H.AMP adjustment (HAMP).

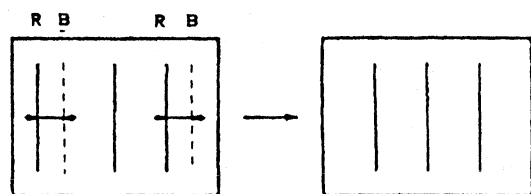


Fig. 3-16

- 4) TILT adjustment (HTLT)

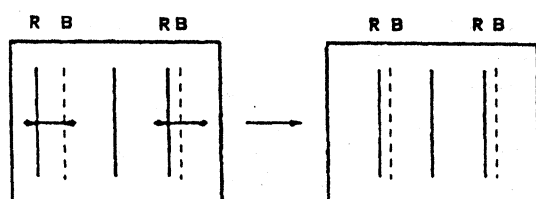


Fig. 3-17

- 5) C.BOW adjustment on the upper side of the screen  
(UP.C.BOW).

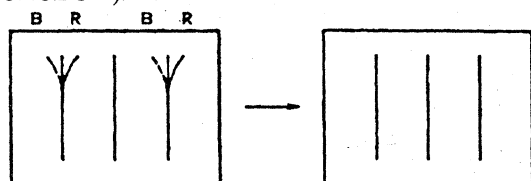


Fig. 3-18

- 6) TILT adjustment on the upper side of the screen  
(UP.TILT).

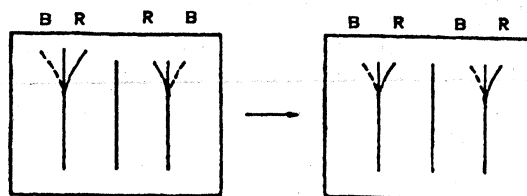


Fig. 3-19

- 7) C.BOW adjustment on the lower side of the screen  
(LO.C.BOW).

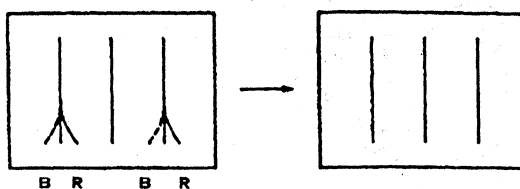


Fig. 3-20

- 8) TILT adjustment on the lower side of the screen  
(LO.TILT).

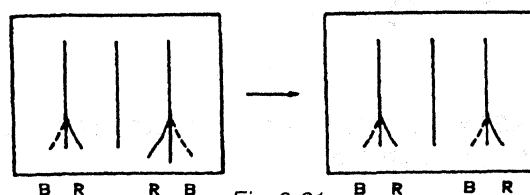


Fig. 3-21

4. If there is a misconvergence in the corner section of the screen, use permalloy to adjust.

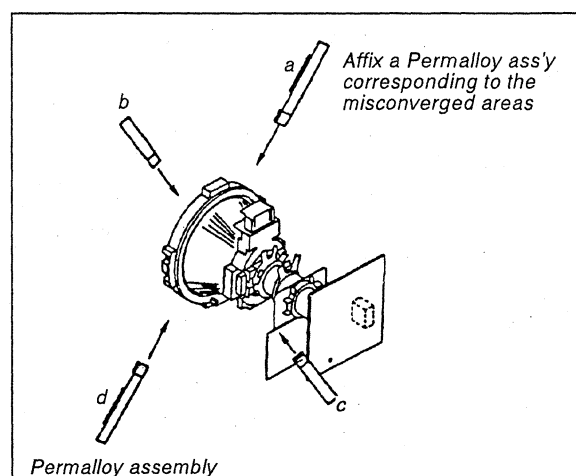
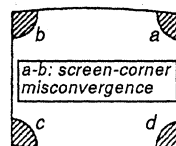


Fig. 3-22

### 3-3. FOCUS ADJUSTMENT

1. Receive a broadcast.
2. Adjust the picture to standard condition.
3. Adjust the focus volume of the flyback transformer until the focus is ideal in the center of the screen. If the focus is adjusted only to the center of the screen, a magenta ring will appear on the screen. In such a case adjust the focus so that is even on all parts of the screen.

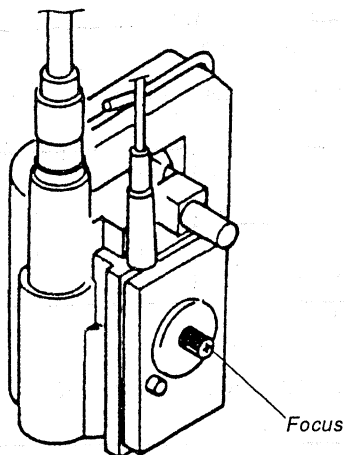


Fig. 3-23

### 3-4. SCREEN (G2) WHITE BALANCE ADJUSTMENT

#### G2 Adjustment (RV710)

1. Adjust the picture and brightness to standard.
2. Connect an oscilloscope to the cathode.
3. Remove CN305 connect pin 1, 2, 3 to an external power supply and adjust the cathode voltage to  $176 \pm 2V$ .
4. Adjust RV710 (G2) by adjusting to a position that is just prior to disappearance of the flyback line on the screen.

#### WHITE BALANCE ADJUSTMENT

(Caution ; Refer to Page 38)

1. Input the gray scale to Line 1 and select 9300 K on the screen menu.
  2. Set so that the user control contrast is minimum and the brightness is reset.
  3. Set in the service mode and adjust so that the 0 IRE of the gray scale is cut off and 10 IRE is slightly bright at a brightness of 01.
  4. Change the signal to the all-white signal and change the signal level so that the center brightness is 10 nit.
- Note :** If fine adjustments of the brightness are not possible with the signal level, use contrast on the user control to adjust.
5. Use the G cutoff and B cutoff to adjust so that the color temperature is  $9300K+8 \text{ MPCD} \pm 2\text{JND}$ .
  6. Set the all-white signal level to 100 IRE.
  7. Use the G drive and B drive to adjust so that the color temperature is  $9300K+8 \text{ MPCD} \pm 2\text{JND}$ .
  8. Adjust the brightness to 10 nit and confirm that the color temperature is  $9300K+8 \text{ MPCD} \pm 2\text{JND}$ . Repeat steps 3 to 7 to adjust when necessary.
  9. Return to step (1) and check whether the brightness has altered. If so, repeat steps 1-8 to adjust.

10. Input the gray signal of the Y color difference signal to Line 3.
11. Change the signal level so that the center brightness is 10 nit.
12. Adjust the G cutoff and B cutoff so that the color temperature is  $9300K+8 \text{ MPCD} \pm 2\text{JND}$ .
13. Change the input to the RGB mode of Line 3 and input the RGB gray signal.
14. Change the signal level so that the brightness in screen center is 10 nit.
15. Adjust the G cutoff and B cutoff so that the color temperature is  $900K+8 \text{ MPCD} \pm 2\text{JND}$ .
16. Save the adjustment data.
17. Change the input to Line 1, change the signal to the gray scale and go to the 6500K mode on the screen menu.
18. Carry out the same adjustments as in steps 2 to 8 so that the color temperature is  $6500K+8 \text{ MPCD} \pm 2\text{JND}$ .
19. Save the adjustment data.
20. Change the input to the component mode of Line 3 and input the gray signal of the Y color difference signal.
21. Carry out exactly the same adjustments as in 11 and 12 so that the color temperature is  $6500K+8 \text{ MPCD} \pm 2\text{JND}$ .
22. Save the adjustment data.
23. Change the input to the RGB mode of Line 3 and input the RGB gray signal.
24. Carry out exactly the same adjustments as in 14 and 15 so that the color temperature is  $6500K+8 \text{ MPCD} \pm 2\text{JND}$ .
25. Save the adjustment data.
26. Change the input to Line 1, change the signal to the gray scale and go to the 3200K mode on the screen menu.
27. Carry out exactly the same adjustments as in steps 2 to 8 so that the color temperature is  $3200K \pm 2\text{JND}$ .
28. Save the adjustment data.
29. Change the input to the component mode of Line 3 and input the gray signal of the Y color difference signal.
30. Carry out exactly the same adjustments as in steps 11 and 12 so that the color temperature is  $3200K \pm 2\text{JND}$ .
31. Save the adjustment data.
32. Change the input to the RGB mode of Line 3 and input the gray signal of RGB.
33. Carry out exactly the same adjustments as in steps 14 and 15 so that the color temperature is  $3200K \pm 2\text{JND}$ .
34. Save the adjustment data.
35. Input a window signal of 100 IRE from Line 1 and go to the 9300K mode. In addition, set the contrast and brightness of the user control to the reset state.
36. Adjust with the picture control until the brightness at the center of the tube is  $200 \pm 10 \text{ nit}$ .
37. Save the adjustment data.
38. Change to the 6500K mode.
39. Adjust the picture adjustment so that the brightness at the center of the tube is  $200 \pm 10 \text{ nit}$ .
40. Save the adjustment data.
41. Change to the 3200K mode.
42. Adjust the picture adjustment so that the brightness at the center of the tube is  $140 \pm 10 \text{ nit}$ .
43. Save the adjustment data.

## SECTION 4 SAFETY RELATED ADJUSTMENTS

### CONFIRMATION OF HOLD-DOWN(☒ R583)

Be sure to carry out the following adjustments after replacing the following parts (indicated with a ☒ sign in the circuit chart).



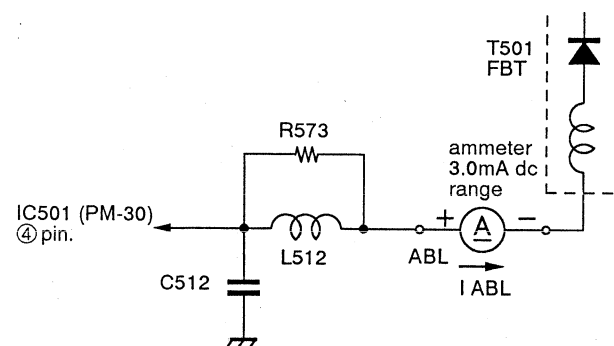
C574, D515, IC501, IC620, Q517, Q518, R578, R580, R581, R582, R583, R584, R585, T504

#### (1) Confirmation of B + line.

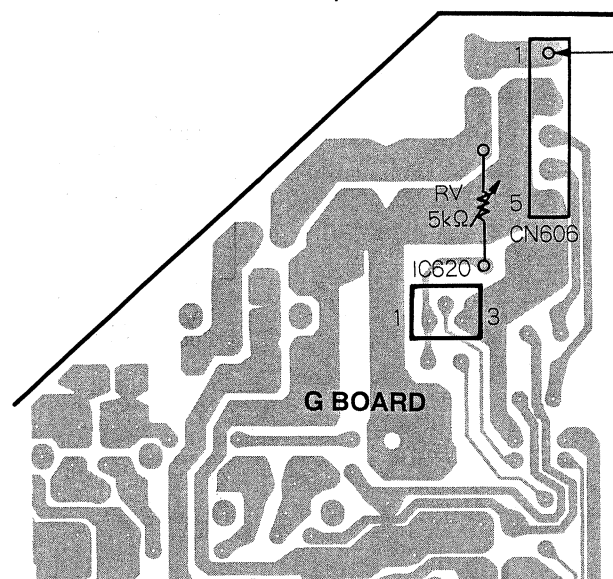
1. Input a voltage of  $130 \pm 0.1$  VAC and set picture and brightness to minimum level.
2. Confirm that the voltage on the B+ line is 135.6 VDC or less when receiving the dot signal.

#### (2) Confirmation of hold-down operation

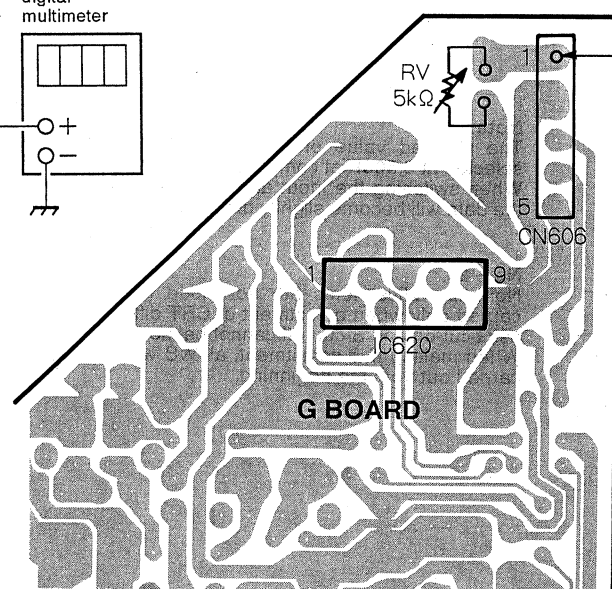
1. Set the power source voltage to AC120V and receive the all-white signal.
2. Adjust the picture and the brightness so that IABL is  $1610 \pm 50$   $\mu$ A.
3. Confirm that the hold-down circuit operates and the raster disappears at a voltage of DC 147.3V or less when applying voltage from external DC power source to the ② pin of IC501.



(US, Canadian Model)



(AEP, AUS Model)



### CONFIRMATION OF HOLD-DOWN(☒ R581)

Be sure to carry out the following adjustments after replacing the following parts (indicated with a ☒ sign in the circuit chart).



C574, D515, IC501, IC620, Q517, Q518, R578, R580, R581, R582, R583, R584, R585, T504

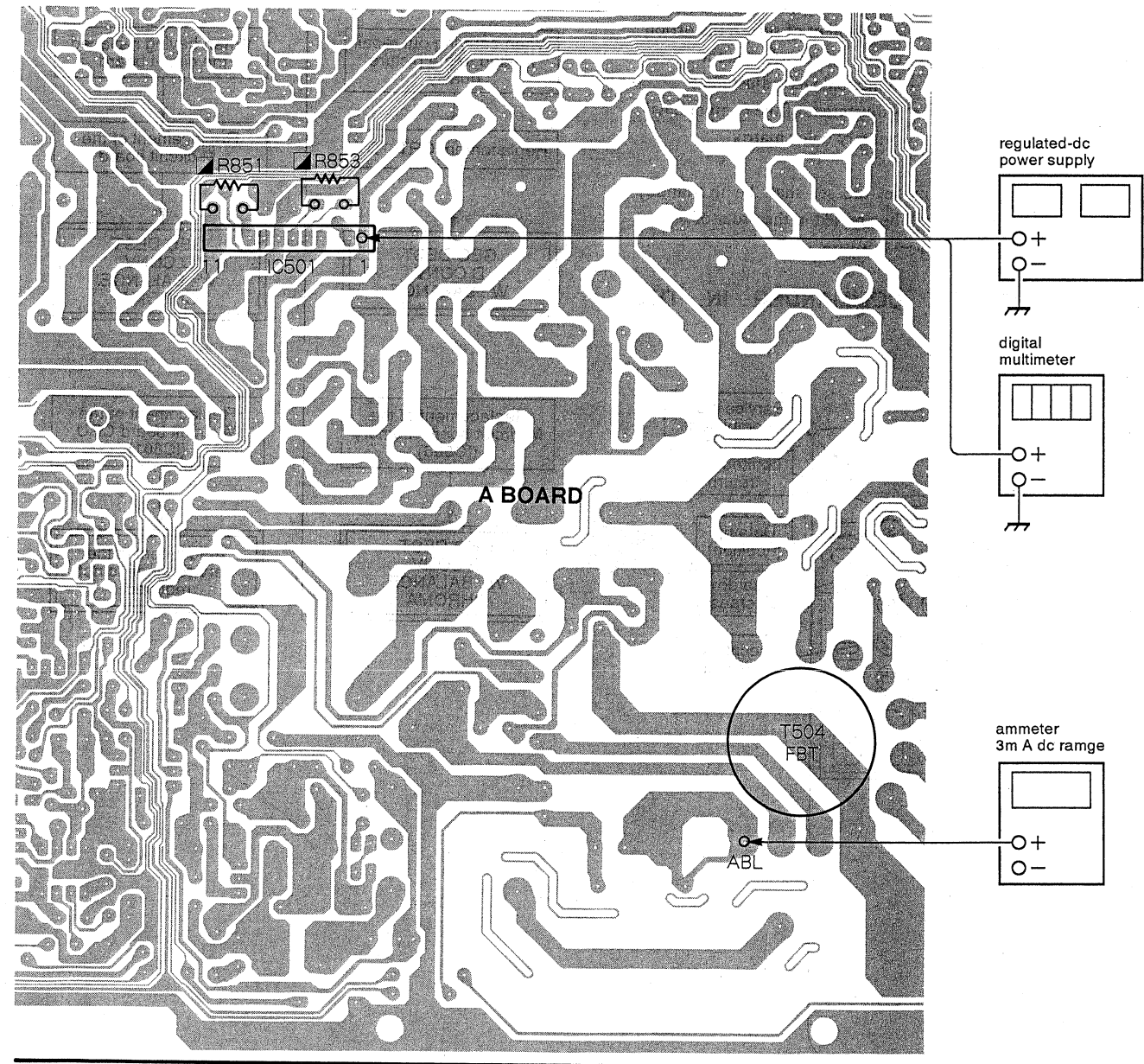
#### (1) Tertiary winding detection

1. Set the power source voltage to AC120V and receive the all-white signal.
2. Adjust the picture and brightness so that IABL is  $1610 \pm 50$   $\mu$ A.
3. Confirm that the hold-down circuit operates and the raster disappears at a voltage of DC147.9V or less when applying voltage from the external DC power source to the ① pin of IC501 on substrate A.

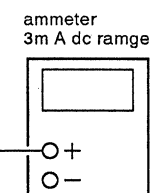
### CONFIRMING THE +B VOLTAGE

The following confirmations must be carried out when replacing IC620.

1. Input  $AC130 \pm 0.1$  V 60 Hz as the input voltage to the power source section.
2. Receive the dot signal and set CONT and BRT to MIN. At this time the voltage on the +B line should be 135.6 V or less.



A BOARD



## SECTION 5

### ELECTRIC ADJUSTMENT IN THE SERVICE MODE

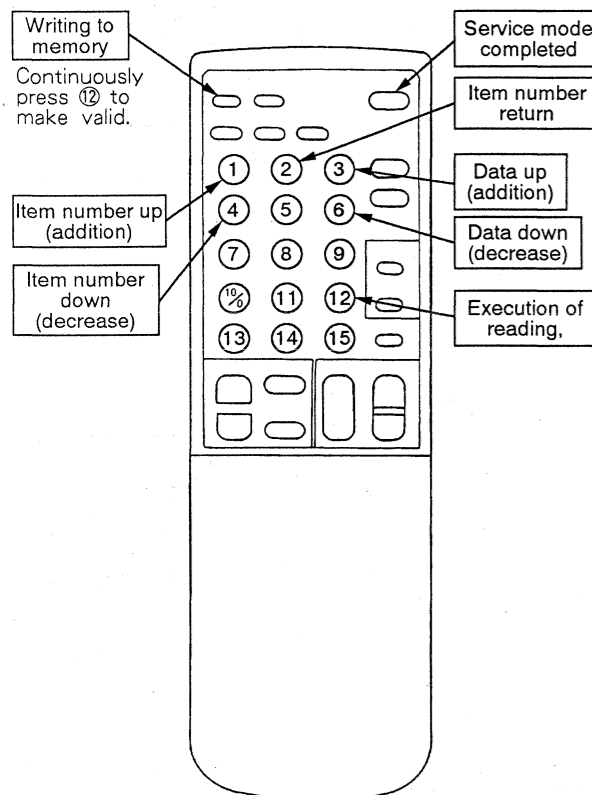
Electric adjustment can be carried out with the remote commander provided with the set (RM-854).

The places to be adjusted in the service mode are as follows.

RESET U MEN.....All user controls shall be preset.  
GEO DEST.....Adjustment of screen distortion  
D CONV.....Convergence adjustment  
W BALANCE.....White balance adjustment  
CHROMA.....Adjustment of the components' primary color matrix

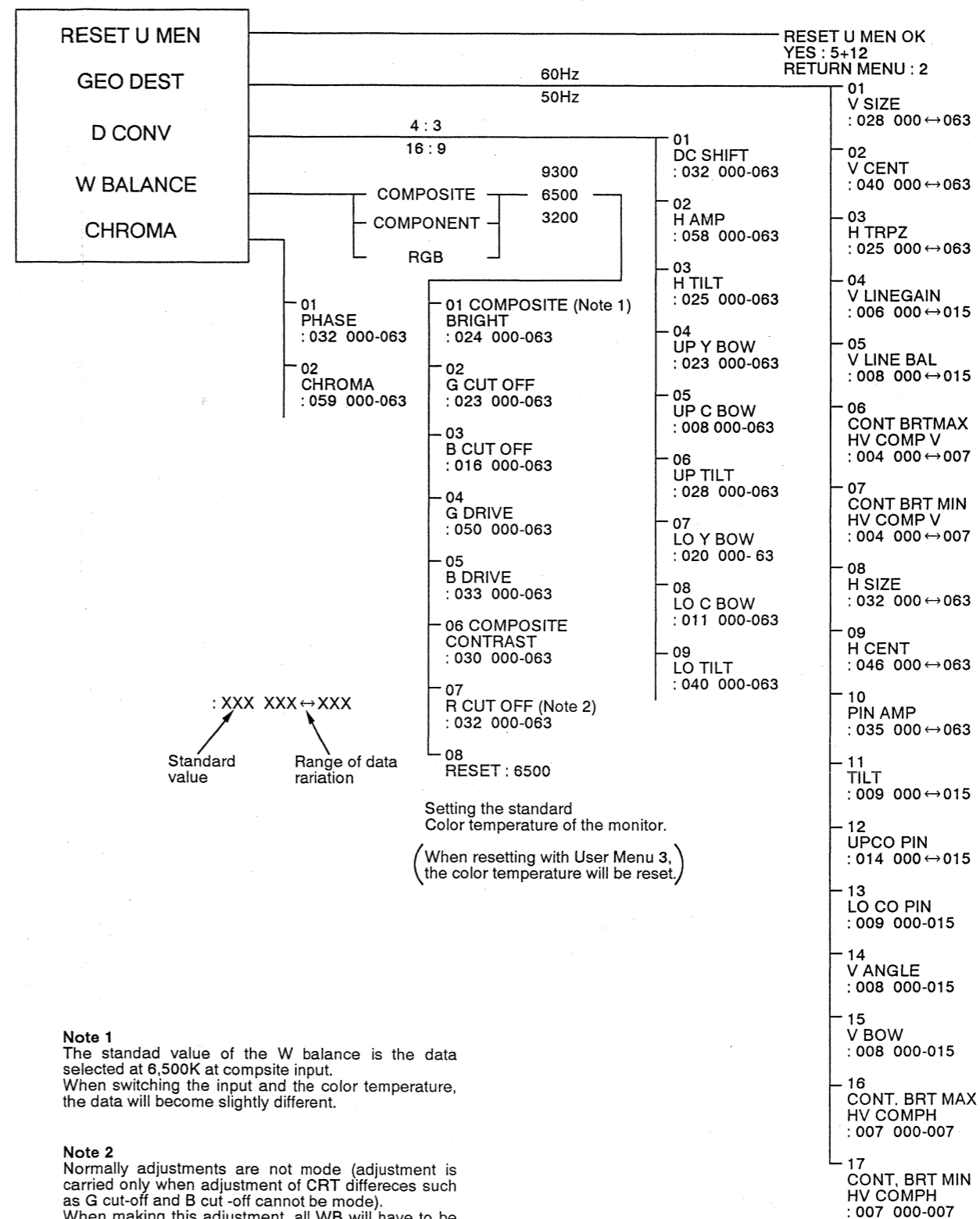
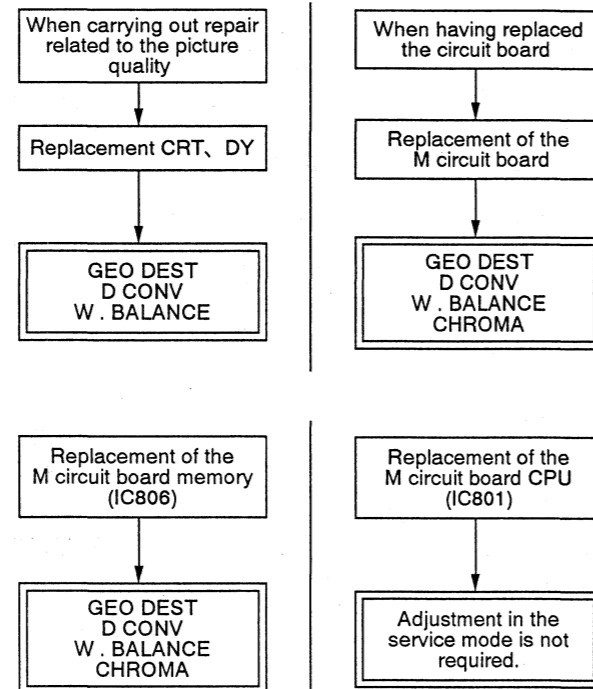
When entering the service mode, the set shall be in standby condition, and each switch shall be pressed in the order of 「Screen display → 5 → VOL+ → POWER」.

#### FUNCTIONS OF THE COMMANDER IN THE SERVICE MODE



#### • WHEN ADJUSTMENT IS REQUIRED IN THE SERVICE MODE

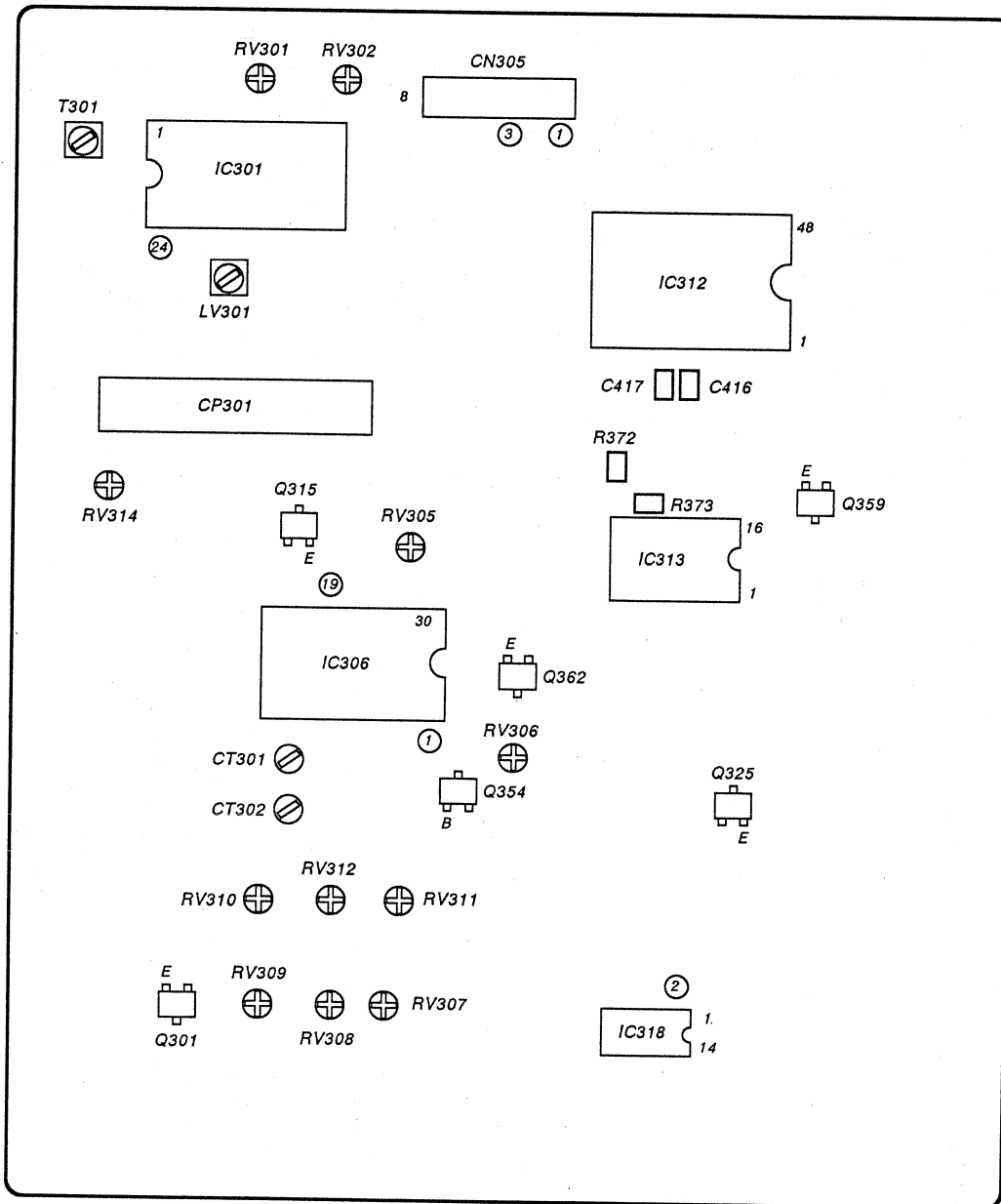
When carrying out the following repairs, please be aware that adjustment in the service mode is required.




## CIRCUIT ADJUSTMENTS

## 6-1. B BOARD ADJUSTMENTS

**B BOARD - CONDUCTOR SIDE -**



1. Call up the set menu and reset all the user control functions.
  2. Connect the oscilloscope between UT board CN205 Pin ③ and ground and adjust RV201 so that the Y output is  $2.0 \pm 0.1$  Vp-p (100% white signal).
  3. Connect the oscilloscope between UT board CN205 Pin 1 and ground and adjust RV202 so that the Burst output is  $200 \pm 10$  mVp-p (100% white signal)
  4. Primary color matrix adjustment
    - 4-1. Input a component 75% color bar R-Y and sync signal to Line 3.
    - 4-2. Set service personnel mode.
    - 4-3. Connect the emitter of Q359 to +12V and the emitter of Q315 to ground.
    - 4-4. Connect the oscilloscope between CN305 Pin ③ and ground and adjust with the remote controller so that B-Out is 50 mVp-p max.
- 
- Fig. 6-1*

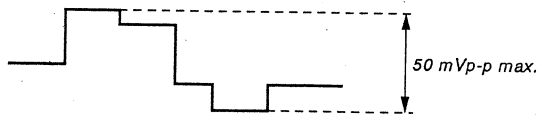


Fig. 6-1

- 4-5. Return Q359 and Q315 to their original connections.
- 4-6. Also input a B-Y/Y signal to Line 3. Adjust with the remote controller so that for the waveform at CN305 Pin ③ (B-Out), A=B.

5. Chroma decoder adjustment

- 5-1. Input NTSC color bars from Line 1.
- 5-2. Connect the oscilloscope to the emitter of Q325 and the emitter of Q326.
- 5-3. Connect the base of Q354 and ground.
- 5-4. Adjust RV306 so that the pulse position phase is as shown in the figure below.

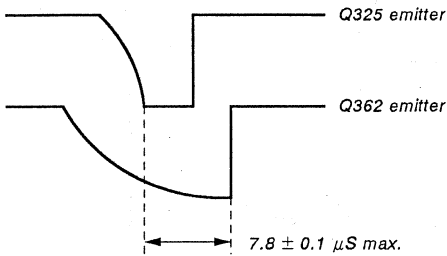


Fig. 6-2

- 5-5. Input an all-white NTSC signal to Line 1.
- 5-6. Return Q354 to its original connections.
- 5-7. Use the circuit in the figure below to supply +12 V to IC306 Pin ①.

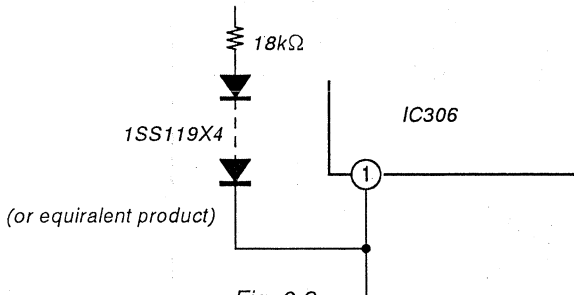


Fig. 6-3

- 5-8. Connect the emitter of Q301 to ground.
- 5-9. Connect IC318 Pin ② to ground.
- 5-10. Connect the frequency counter to IC306 Pin ⑩ and adjust CT301 so that the frequency is  $3579545 \pm 30$  Hz.
- 5-11. Convert the signal to an all-white PAL signal.
- 5-12. Check that IC318 Pin ② is +5V.
- 5-13. Connect the frequency counter to IC306 Pin ⑩ and adjust CT302 so that the frequency is  $4433619 \pm 30$  Hz.

6. NTSC Hue/Color Adjustment

- 6-1. Input color bars including only the burst and R-Y components from Line 1.

- 6-2. Connect the oscilloscope to the C417 ⊕ side and adjust RV308 so that the waveform is as shown in the figure below.

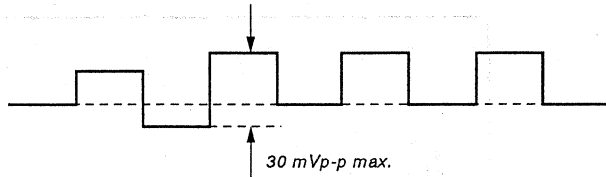


Fig. 6-4

- 6-3. Change the signal to NTSC 75% full color bars.
- 6-4. Connect the oscilloscope between C417 and R372 and adjust RV311 so that the waveform is as below.

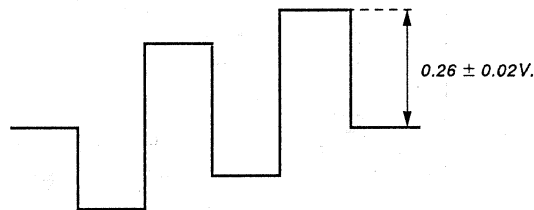


Fig. 6-5

- 6-5. Connect the oscilloscope between C416 and R373 and adjust RV305 so that the waveform is as below.

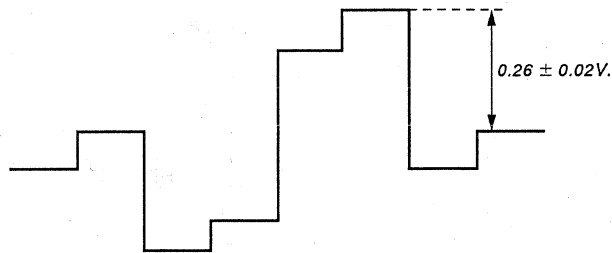
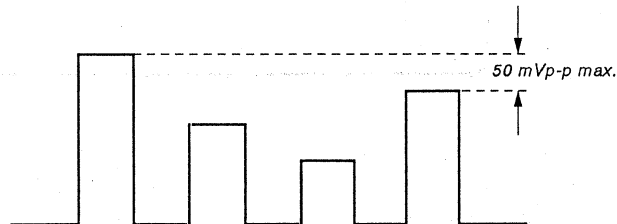


Fig. 6-6

- 6-6. Connect the oscilloscope to CN305 Pin ③ and adjust RV311 so that the waveform is as below.



Make the 1st waveform and the 4th waveform the same.

Fig. 6-7

- 6-7. Switch the signal to 4.43 NTSC 75% color bars.

6-8. Connect the oscilloscope to CN305 Pin ③. Secure the tracking and adjust with RV307 and RV310 so that the heads of the waveforms line up.

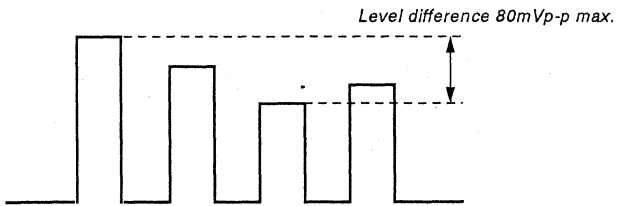


Fig. 6-8

#### 7. PAL Color Demodulation Adjustment

7-1. Input the PAL special color bars from Line 1.

7-2. Connect the oscilloscope to C416 and R373 and adjust RV309 so that the anti-PAL signal is as in the figure below.

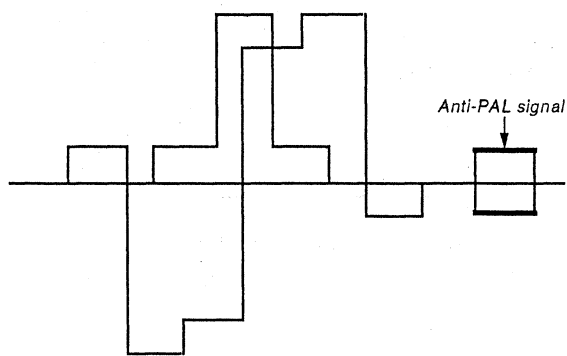
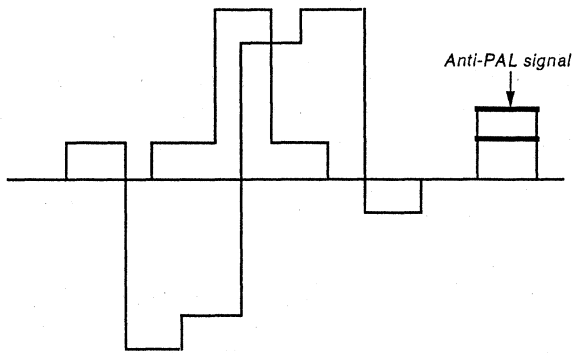


Fig. 6-9

7-3. Connect the oscilloscope to C417 and R372 and adjust RV2 on CP301 so that the anti-PAL signal is as in the figure below.

7-4. Secure the tracking for 7-2. and 7-3.

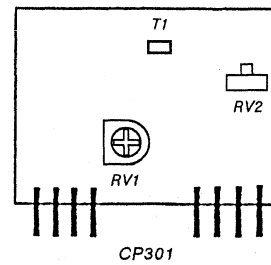
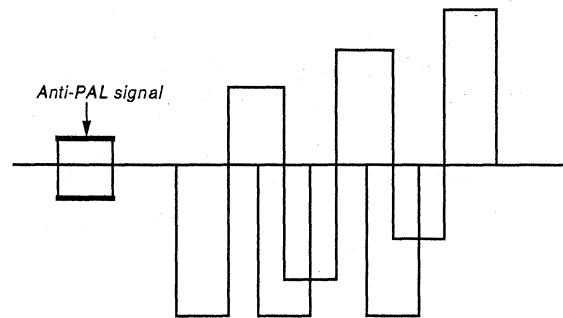
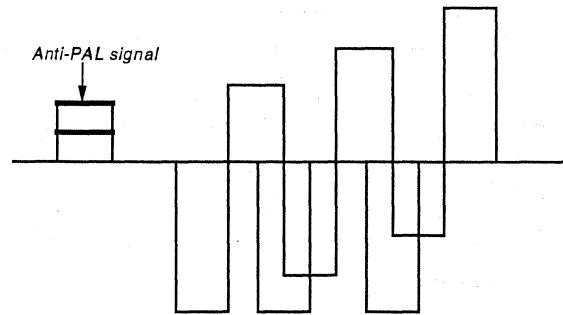


Fig. 6-10

7-5. Connect the oscilloscope to C416 and R373 and adjust RV312 so that the waveform is as in the figure below.

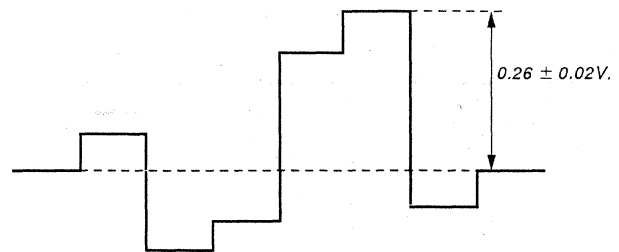


Fig. 6-11

- 7-6. Connect the oscilloscope to C417 and R372 and adjust RV314 so that the waveform is as in the figure below.

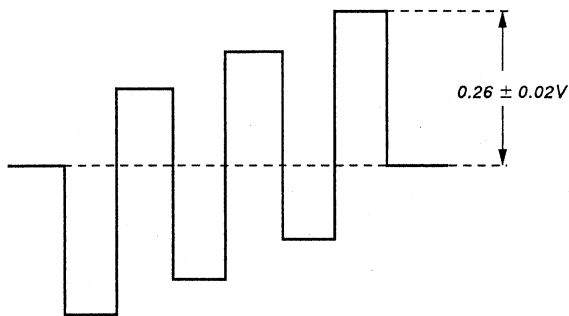


Fig. 6-12

- 7-7. Change the signal to PAL 75% color bars.

- 7-8. Connect the oscilloscope to CN305 Pin ③ and adjust RV312 so that the waveform is as in the figure below.

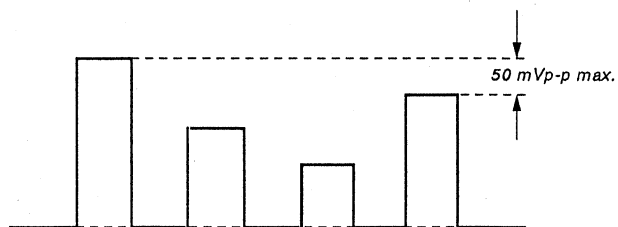


Fig. 6-13

#### 8. Line crawling adjustment

- 8-1. Input 75% PAL color bars from Line 1.  
8-2. Connect the oscilloscope to CN305 Pin ③ and check that the output difference per 1H for the waveform is under 5%.  
8-3. If the difference is over 5%, measure between C416 and R373 and between C417 and R372, change the signal to a PAL SP CB signal and adjust T1 on CP301 to minimize the level difference per 1H of the anti-PAL signal.

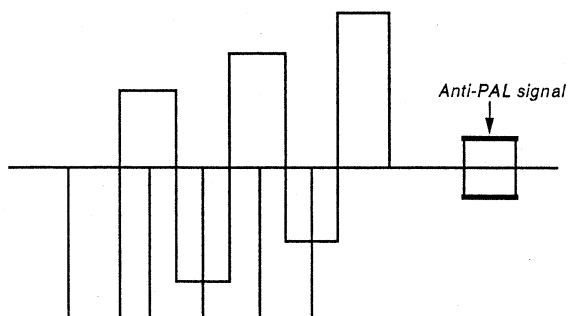


Fig. 6-14

- 8-4. Repeat the adjustment from 7-1.

#### 9. SECAM bell filter adjustment

- 9-1. Input SECAM color bars to Line 1.  
9-2. Connect the oscilloscope to IC303 Pin ② and adjust T301 so that the waveform is as in the figure below.

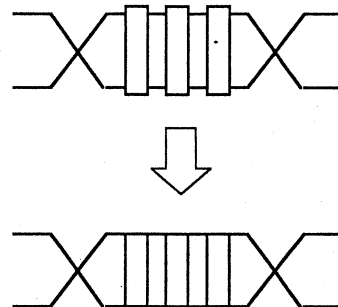


Fig. 6-15

- 9-3. Input SECAM color bars to Line 1 (100% white).  
9-4. Connect the oscilloscope to the emitter of Q359 and adjust with RV313 so that the waveform is as in the figure below.

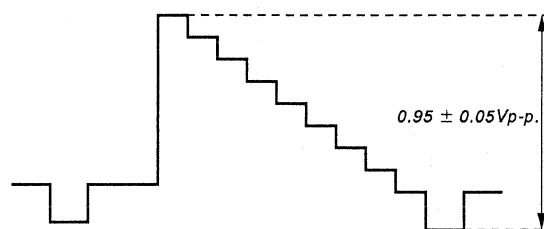


Fig. 6-16

- 9-5. Connect the oscilloscope between C417 and R372 and adjust LV301 so that the B-Y waveform no-color component level is a straight line.

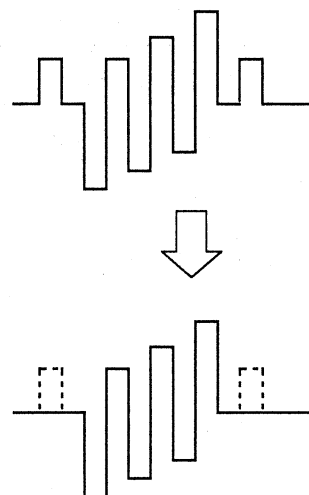


Fig. 6-17

9-6. Connect the oscilloscope between C416 and R373 and adjust LV301 so that the R-Y waveform no-color component level is a straight line.

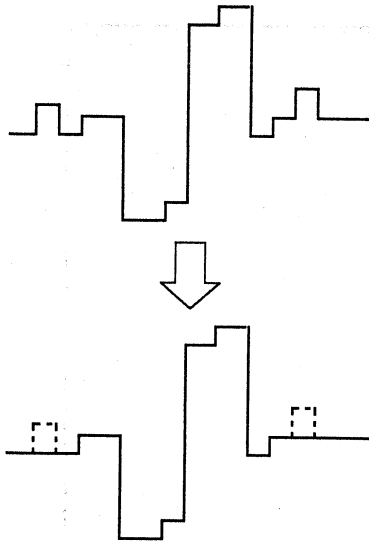


Fig. 6-18

9-7. Input SECAM color bars to Line 1 (75% chroma).

9-8. Connect the oscilloscope between C417 and R372 and adjust RV301 so that the B-Y waveform level is as in the figure below.

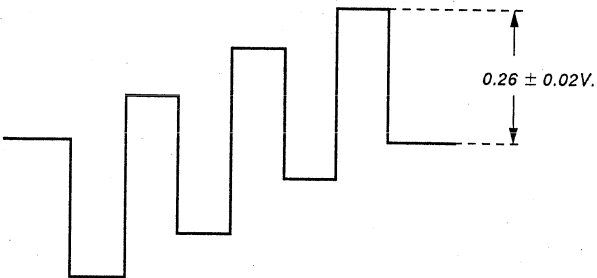


Fig. 6-19

9-9. Connect the oscilloscope between C416 and R373 and adjust RV302 so that the R-Y waveform level is as in the figure below.

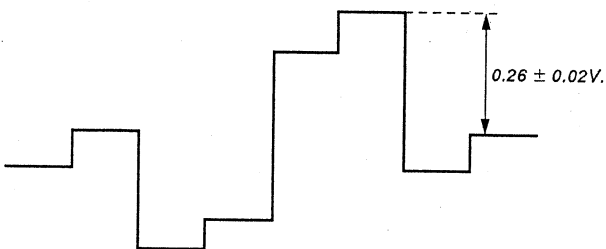


Fig. 6-20

9-10. Connect the oscilloscope to CN305 Pin ③ Ȳ and adjust RV301 so that the heads of the B-Out waveforms line up.

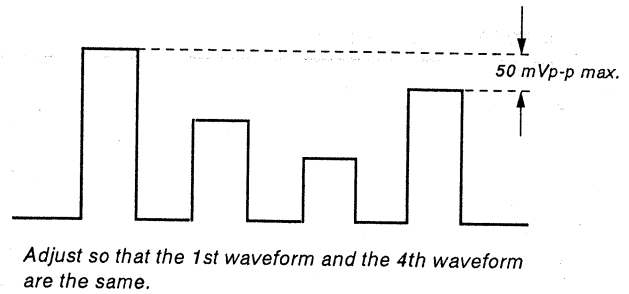
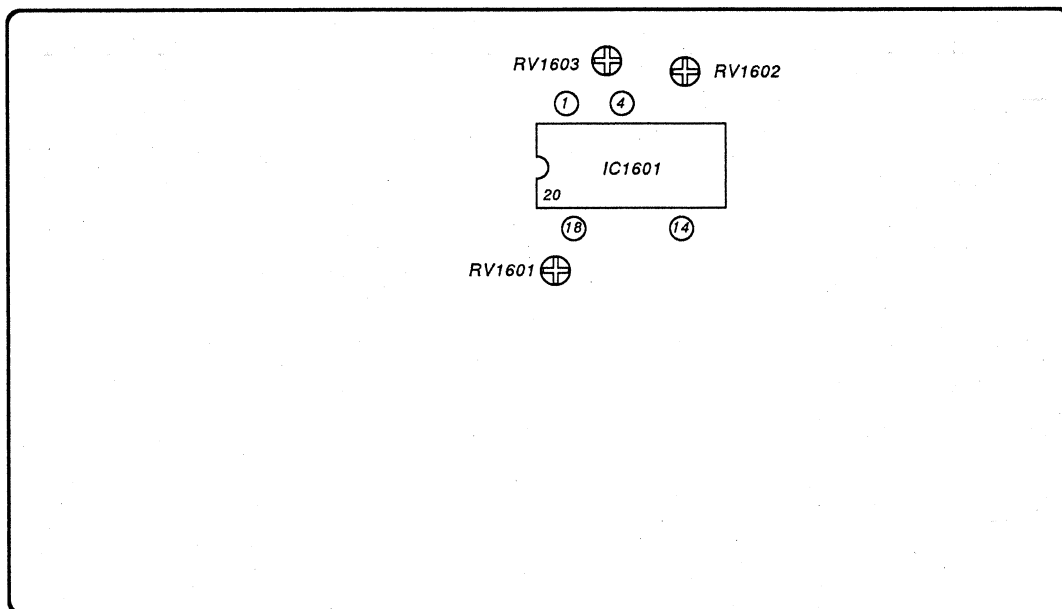


Fig. 6-21

## 6-2. A BOARD ADJUSTMENT

A BOARD – CONDUCTOR SIDE –



### 1. Hfo adjustment

- 1-1. Input NTSC color bars.
- 1-2. Short IC1601 Pin ① and Pin ⑭.
- 1-3. Connect a frequency counter to IC1601 Pin 4.
- 1-4. Adjust RV1602 so that the frequency is  $15734 \pm 50$  Hz.
- 1-5. Input PAL color bars.
- 1-6. Adjust RV1603 so that the frequency is  $15624 \pm 50$  Hz.
- 1-7. Remove the jumper from IC1601.

### 2. V Oscillator adjustment

- 2-1. Connect the oscilloscope to IC1601 Pin ⑮ and adjust RV1601 so that the waveform is as shown in the figure below.

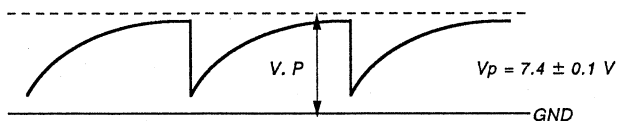
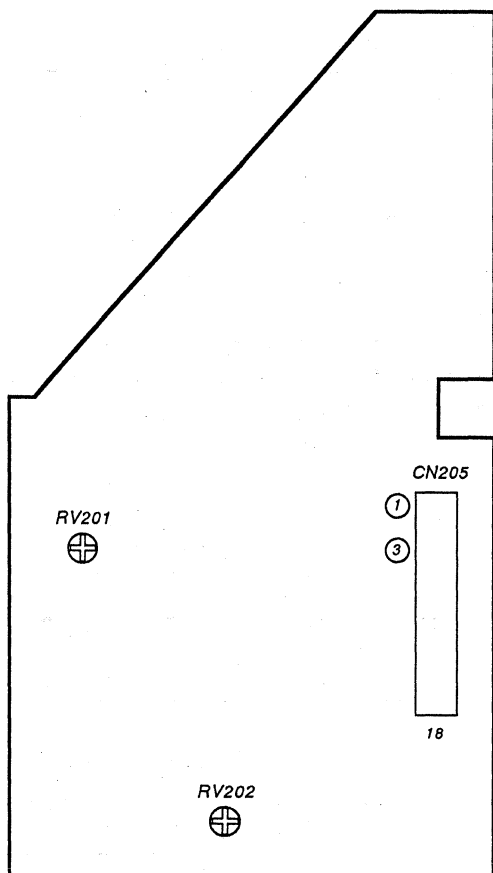


Fig. 6-22

### 6-3. UT BOARD ADJUSTMENT

UT BOARD — CONDUCTOR SIDE —



#### 1. Y signal

- 1-1. Input a 75% white signal, 75% full field signal from SG1410.
- 1-2. Connect the oscilloscope to CN205 Pin ③ and adjust RV201 so that the Y level is as in the figure below.

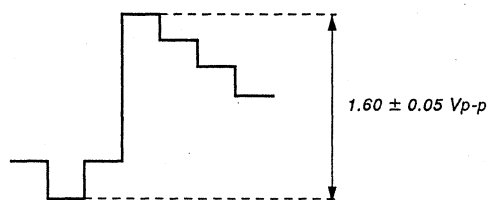


Fig. 6-23

- 1-3. Input a 14.31818MHz clock synchronized with the composite video signal to CN203 Pin ①.
- 1-4. Connect the oscilloscope to CN205 Pin ① and adjust RV202 so that the burst level is as shown in the diagram.

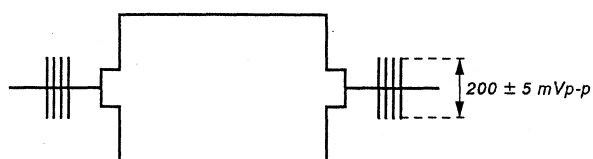
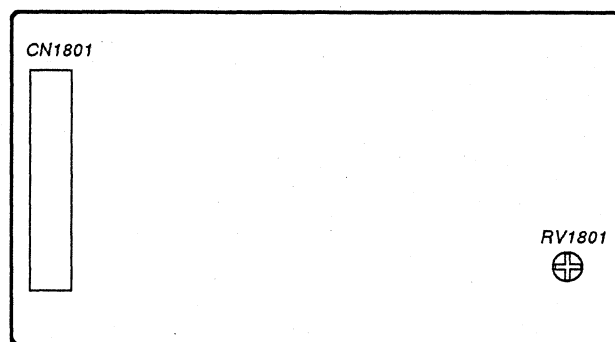


Fig. 6-24

### 6-4. VC BOARD ADJUSTMENT

VC BOARD — CONDUCTOR SIDE —



1. Use the circuit in the figure below

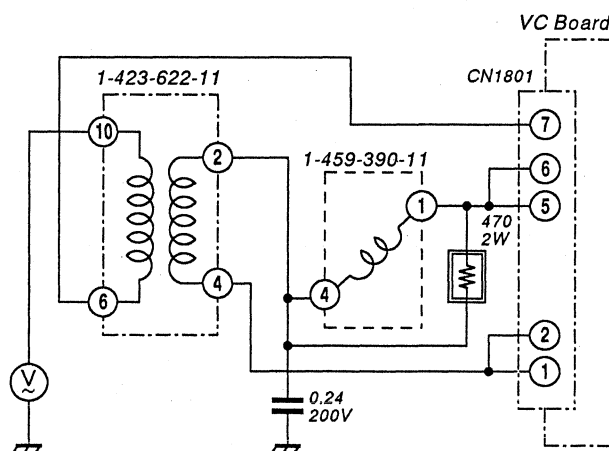


Fig. 6-25

2. Adjustment with RV1801 so that the reading of the voltmeter becomes maximum.

(Notes)

Regarding the white Balance Adjustment

Data memory for white balance adjustment is not available for all color temperatures of all signals.  
Each data memory is assigned as shown in the table below. However, as variables are possible (adjustment of each item) for signals and color temperatures that have not been actually assigned, it is necessary to exercise care.

Example 1 :

At a setting of an input signal component and color temperature of 9300, a data variable of 01 : BRIGHT is possible, but as only one memory each is available for each color temperature, the BRIGHT data of the composite RGB may also change in the same manner when using this setting. (It is the same for the CONTRAST too.)

Example 2 :

Due to variations in the characteristics of the R CUT OFF, these characteristics have to be adjusted only in cases in which the white balance cannot be adjusted, but normally they are not adjusted. As there is only one data memory each for all conditions, the black level of the red color for all signals and color temperatures ( the white balance of the black side) change when changing this data.

		1	2	3	4	5	6	7	8
		BRIGHT	G CUTOFF	B CUTOFF	G DRIVE	B DRIVE	CONTR.	R CUTOFF	RESET
COMPOS.	9,300	O	O	O	O	O	O	X	
	6,500	O	O	O	O	O	O	●	●
COMPONENT	9,300	X	O	O	X	X	X	X	
	6,500	X	O	O	X	X	X	X	
	3,200	X	O	O	X	X	X	X	
RGB	9,300	X	O	O	X	X	X	X	
	6,500	X	O	O	X	X	X	X	
	3,200	X	O	O	X	X	X	X	

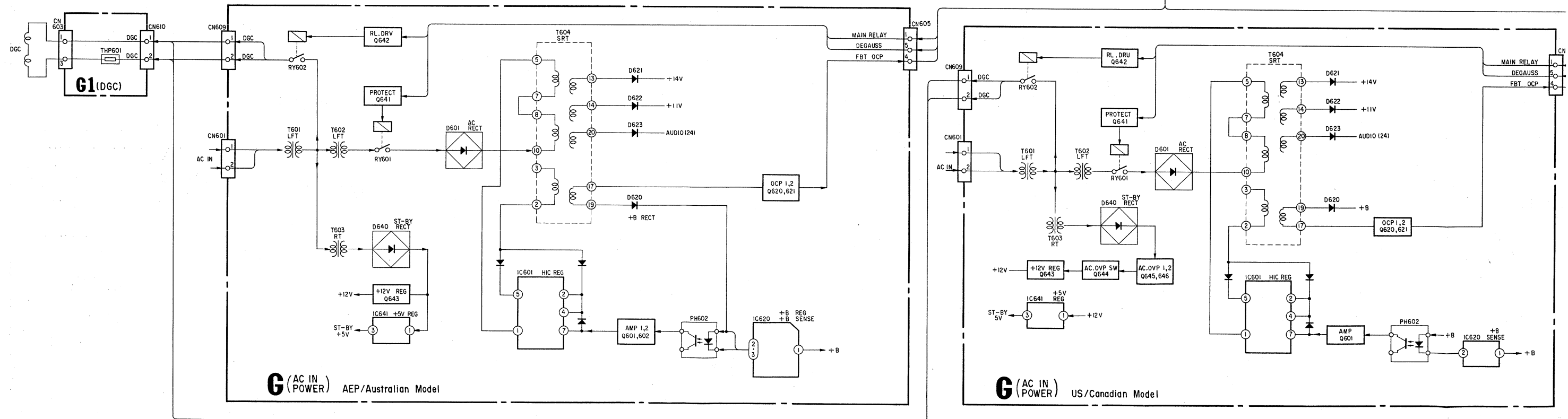
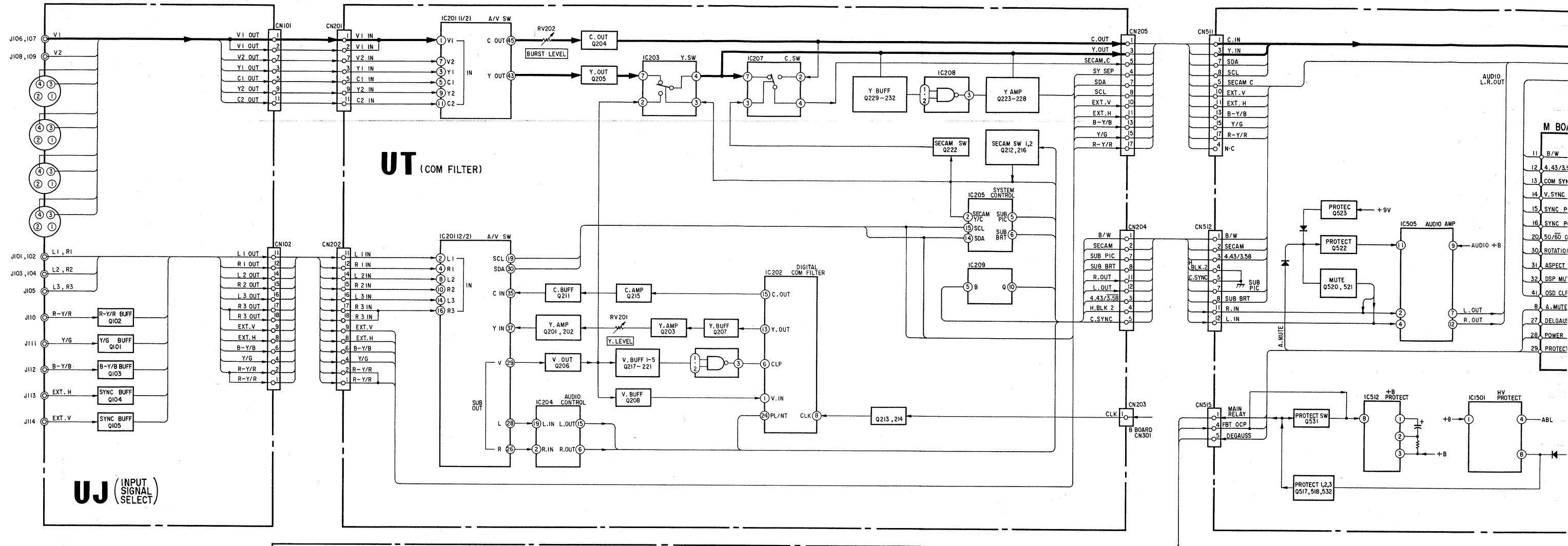
- O: Memory is available for each color temperature of the composite signals.
- O: Memory is available for each color temperature for each signal.
- : Only one memory is available for all color temperatures of all signals
- X: No memory is available. Data variation is possible, but basically no adjustment is made under this condition.  
(Please refer to Example 1 and Example 2 in the preceding text.)

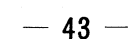
# 7-1. BLOCK DIAGRAMS (1)

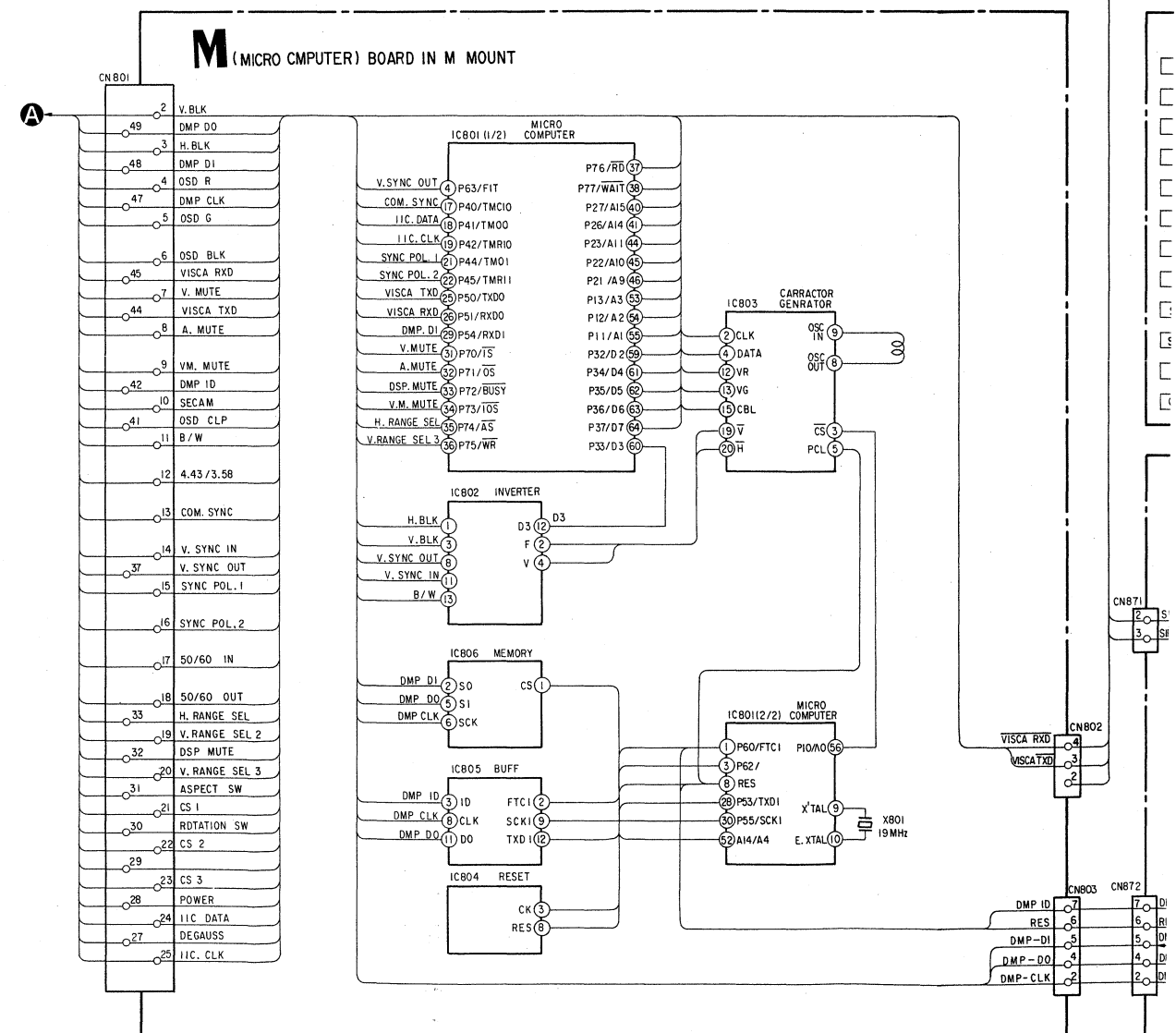
## SECTION 7 DIAGRAMS

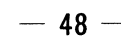
PVM-2950Q/2950QM  
RM-854

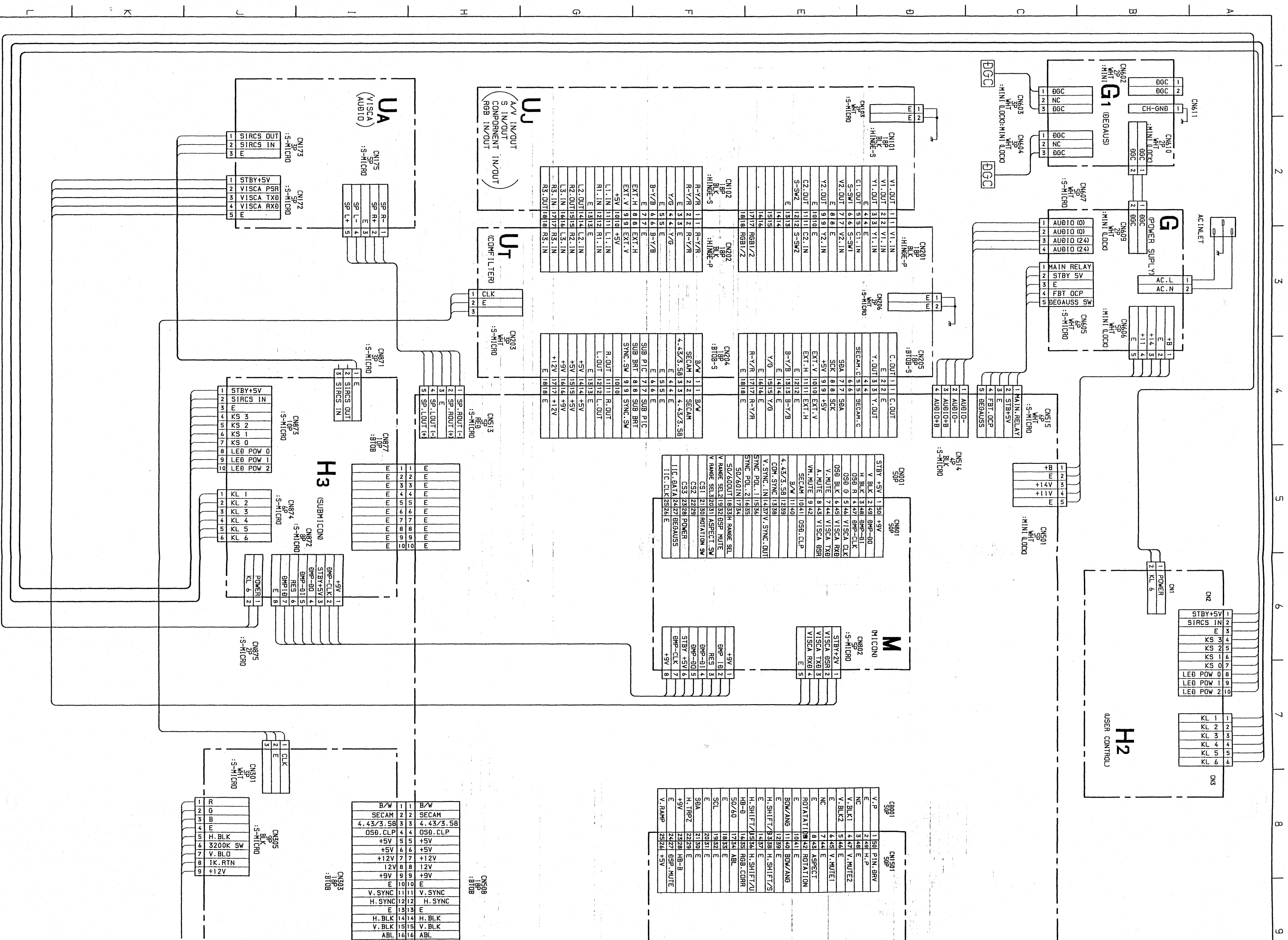
PVM-2950Q/2950QM  
RM-854











CN501 50P :S-MICRO	
V.P	1 50 PIN DRV
E	2 49 H.P
NC	3 48 E
V.BLK1	4 47 V.MUTE2
E	5 46 E
V.BLK2	6 45 V.MUTE1
NC	7 44 E
E	8 43 ASPECT
ROTARY1	9 42 ROTATION
E	10 41 E
BOW/ANG	11 40 BOW/ANG
E	12 39 E
H.SHIFT/	13 38 H.SHIFT/S
E	14 37 E
H.SHIFT/	15 36 H.SHIFT/U
HB-D	16 35 RGB CORR
50/60	17 34 ABL
E	18 33 E
SCL	19 32 E
E	20 31 E
SBA	21 30 E
H.TRPZ	22 29 E
+9V	23 28 HB-B
E	24 27 GSP.MUTE
V.RAMP	25 26 +5V

**DX**  
(SYSTEM CONT)

CN1805 18P :BTOB	
V-PIN-V	1 1 V-PIN-V
V-PIN-V	2 2 V-PIN-V
E	3 3 E
E	4 4 E
V-PIN-H	5 5 V-PIN-H
V-PIN-H	6 6 V-PIN-H
VP-OUT-	7 7 VP-OUT-
FBI-15V	8 8 FBI-15V
FBI-15V	9 9 FBI-15V
FBI 12V	10 10 FBI 12V
FBI 12V	11 11 FBI 12V
H.BRV	12 12 H.BRV
H.TRPZ	13 13 H.TRPZ
PIC.TILT	14 14 PIC.TILT
15 15	
16 16	
P.T MUTE	17 17 P.T MUTE
18 18	

**VC**  
(V-PIN Q P)

CN1950  
2P  
:S-MICRO

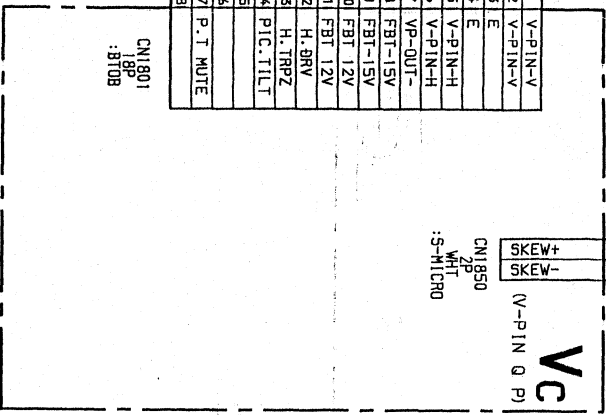
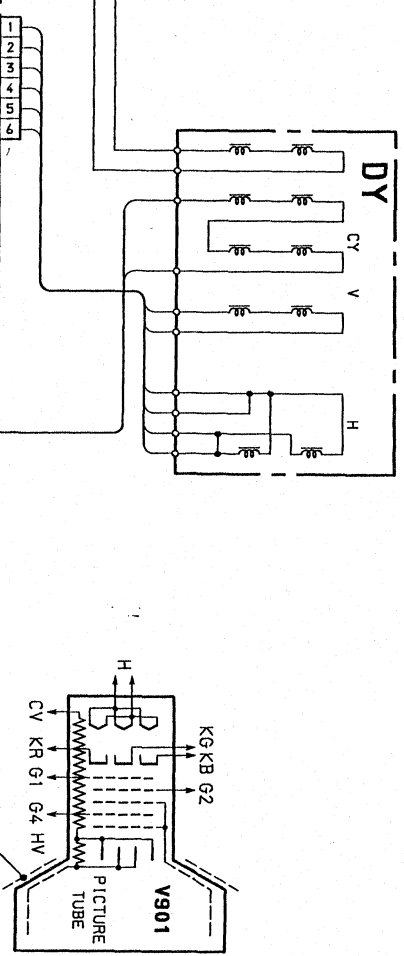
1000V	1 1 1000V
200V	2 2 200V
E	3 3 E
N.C	4 4
H1	5 5 H1
H2	6 6 H2

CN703  
6P  
:MINI

CN704  
2P  
:MINI

CN702  
6P  
:S-MICRO

R 1	1 1
G 2	2 2
B 3	3 3
E 4	4 4
H.BLK5	5 5
V.BLK6	6 6
IK.RTN7	7 7
+12V8	8 8



CY+1	1 1
CY-3	2 2
3	3

CY-2  
3P  
:MINI

(SYNC OSC. DYNAMIC CONW.)  
H.SFT CONTROL,  
V.PARA OUT. GSP DRIVE,  
H/V OUT. HV PROTECT.  
AUDIO AMP. OF DRIVE.

**A**

+B	1 1
+B	2 2
E	3 3
12V	4 4
VM OUT	5 5
VM MUTE	6 6
Q.P+	7 7
NC	8 8
Q.P-	9 9

CN901  
9P  
:S-MICRO

**V**  
(VM AMP)

B/W	1 1
SECAM	2 2
4.43/3.58	3 3
OSD.CLIP	4 4
+5V	5 5
+5V	6 6
+12V	7 7
12V	8 8
+9V	9 9
E	10 10
V.SYNC	11 11
H.SYNC	12 12
E	13 13
H.BLK	14 14
V.BLK	15 15
ABL	16 16
VM.OUT	17 17
50/60	18 18

CN303  
18P  
:BTOB

RGB.CORR	1 1
V MUTE	2 2
V SYNC	3 3
2H SYNC	4 4
2V SYNC	5 5
H SYNC	6 6
E	7 7
R-Y	8 8
Y	9 9
B-Y	10 10
E	11 11
2 R-Y	12 12
2Y	13 13
2 B-Y	14 14
SYNC.POL.	15 15
SYNC.POL.2	16 16
PIC	17 17
BRT	18 18

CN304  
18P  
:BTOB

C.IN	1 1
E	2 2
Y.IN	3 3
E	4 4
OSD.R	5 5
OSD.G	6 6
OSD.BLK	7 7
E	8 8
SBA	9 9
SCK	10 10
EXT.V	11 11
EXT.H	12 12
E	13 13
B-Y/B	14 14
E	15 15
Y/G	16 16
SECAM.C	17 17
R-Y/R	18 18

CN302  
18P  
:BTOB

(SYNC SEP. SYNC SW.)  
VIDEO SW. PULSE GENE.  
NT/PAL DECOD  
SYSTEM SW

**B**

R	1 1
G	2 2
B	3 3
E	4 4
H.BLK	5 5
3200K SW	6 6
V.BLO	7 7
IK.RTN	8 8
+12V	9 9

CN301  
9P  
:S-MICRO

1	STBY+5V	1	KL 1
2	STIRCS IN	2	KL 2
3	E	3	KL 3
4	KS 3	4	KL 4
5	KS 2	5	KL 5
6	KS 1	6	KL 6
7	KS 0		
8	LED POW 0		
9	LED POW 1		
10	LED POW 2		

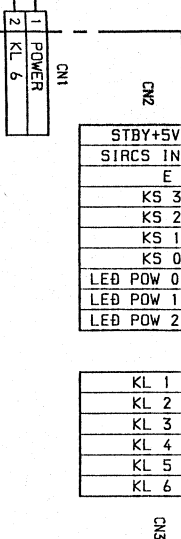
**H2**  
(USER CONTROL)

1	+	+
2	+	+
3	+	+
4	+	+
5	+	+

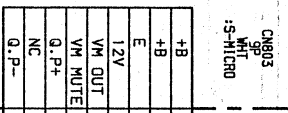
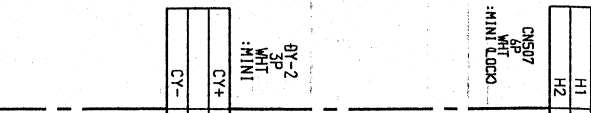
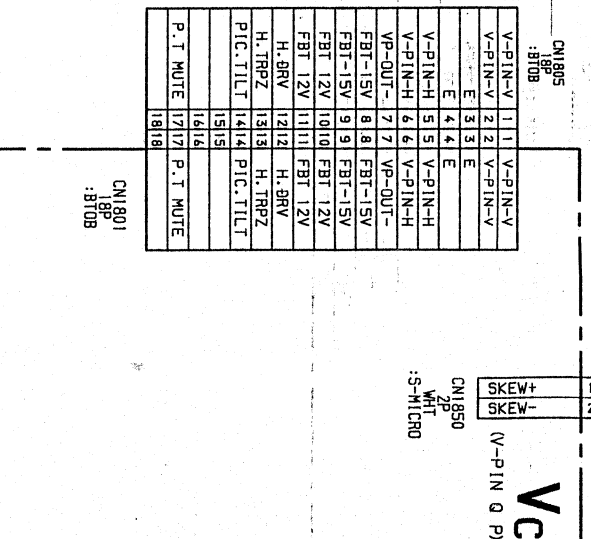
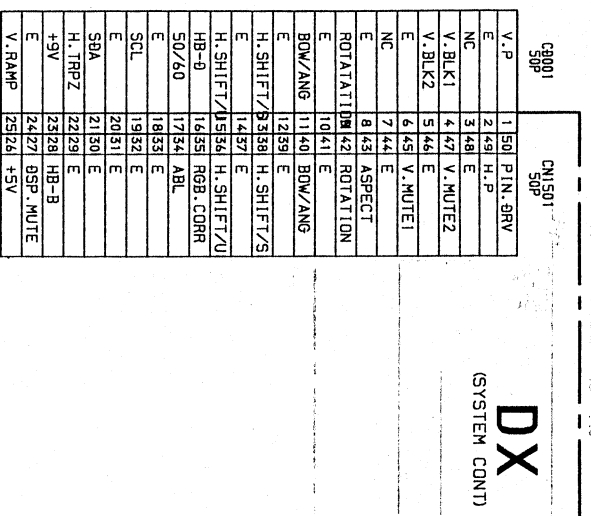
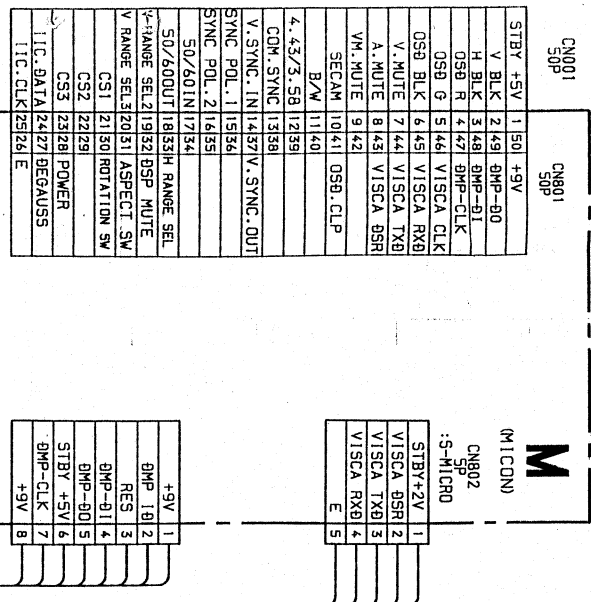
CN501  
50P  
SP  
WHT  
:MINI LOCK

1	V-
2	V+
3	H+
4	H+
5	H-
6	H-

BY-1  
3P  
WHT  
:BY LOCK



CN514  
4P  
BLK  
:S-MICRO



1	+	+
2	+	+
3	+	+
4	+	+
5	+	+
6	+	+
7	+	+
8	+	+
9	+	+
10	+	+

**H3**  
(SUBMICRON)

1	+9V
2	DMF-CLK
3	STBY+5V
4	DMF-01
5	DMF-01
6	RES
7	DMF-01
8	DMF-01
9	DMF-01
10	DMF-01

1	POWER
2	KL 6
3	KL 6
4	KL 6
5	KL 6
6	KL 6
7	KL 6
8	KL 6
9	KL 6
10	KL 6

1	CLK
2	E
3	E
4	E
5	E
6	E
7	E
8	E
9	E
10	E

1	R
2	G
3	B
4	E
5	H.BLK
6	3200K SW
7	V.BLO
8	IK.RTN
9	+12V

1	+	+
2	+	+
3	+	+
4	+	+
5	+	+
6	+	+
7	+	+
8	+	+
9	+	+
10	+	+

1	+	+
2	+	+
3	+	+
4	+	+
5	+	+
6	+	+
7	+	+
8	+	+
9	+	+
10	+	+

1	+	+
2	+	+
3	+	+
4	+	+
5	+	+
6	+	+
7	+	+
8	+	+
9	+	+
10	+	+

1	+	+
2	+	+
3	+	+
4	+	+
5	+	+
6	+	+
7	+	+
8	+	+
9	+	+
10	+	+

1	+	+
2	+	+
3	+	+
4	+	+
5	+	+
6	+	+
7	+	+
8	+	+
9	+	+
10	+	+

(VIDEO SEP. SYNC SW.  
SECAM DECOD  
NT/PAL DECOD  
SYSTEM SW)

**B**

(SYNC OSC. DYNAMIC CONV.)  
H.SFT CONTROL.  
V.PARA OUT. DOP DRIVE.  
H/V OUT. HV PROTECT.  
AUDIO AMP. OF DRIVE.

**A**

1	+B
2	+B
3	E
4	12V
5	VM OUT
6	VM MUTE
7	Q.P+
8	NC
9	Q.P-

1	KS 0
2	LED POW 0
3	LED POW 1
4	LED POW 2
5	LED POW 3
6	LED POW 4
7	LED POW 5
8	LED POW 6
9	LED POW 7
10	LED POW 8

1	KL 1
2	KL 2
3	KL 3
4	KL 4
5	KL 5
6	KL 6
7	KL 7
8	KL 8
9	KL 9
10	KL 10

1	POWER
2	KL 6
3	KL 6
4	KL 6
5	KL 6
6	KL 6
7	KL 6
8	KL 6
9	KL 6
10	KL 6

1	CLK
2	E
3	E
4	E
5	E
6	E
7	E
8	E
9	E
10	E

1	R
2	G
3	B
4	E
5	H.BLK
6	3200K SW
7	V.BLO
8	IK.RTN
9	+12V

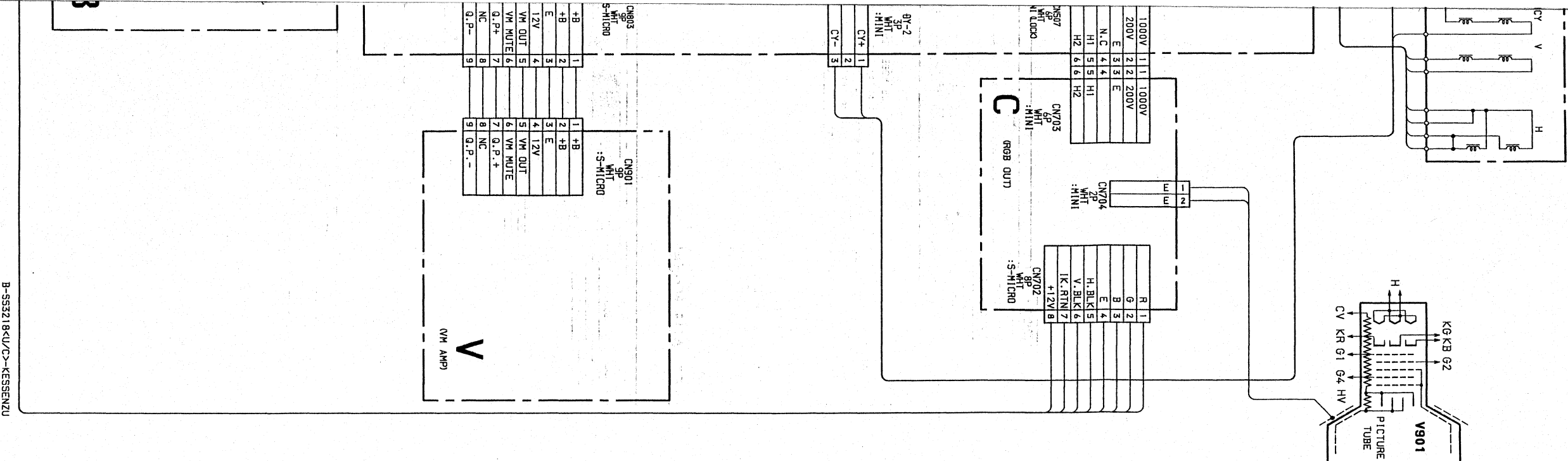
1	+	+
2	+	+
3	+	+
4	+	+
5	+	+
6	+	+
7	+	+
8	+	+
9	+	+
10	+	+

1	+	+
2	+	+
3	+	+
4	+	+
5	+	+
6	+	+
7	+	+
8	+	+
9	+	+
10	+	+

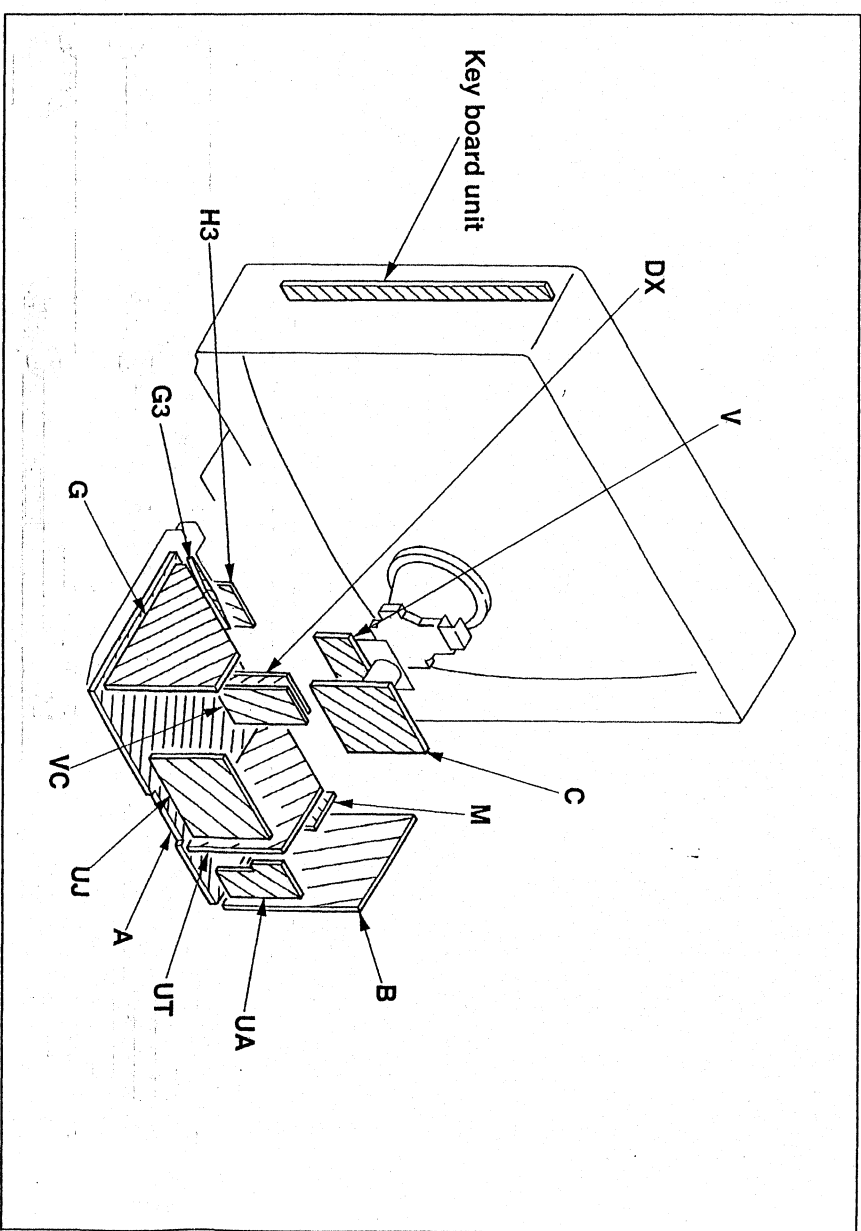
1	+	+
2	+	+
3	+	+
4	+	+
5	+	+
6	+	+
7	+	+
8	+	+
9	+	+
10	+	+

1	+	+
2	+	+
3	+	+
4	+	+
5	+	+
6	+	+
7	+	+
8	+	+
9	+	+
10	+	+

1	+	+
2	+	+
3	+	+
4	+	+
5	+	+
6	+	+
7	+	+
8	+	+
9	+	+
10	+	+



### 7-3. CIRCUIT BOARDS LOCATION














## 7-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

**Note:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.
- PF:  $\mu\text{F}$  50WV or less are not indicated except for electrolytic and tantalums.
- All electrolytics are in 50V unless otherwise specified.
- All resistors are in ohms.
- $K\Omega = 1000\Omega$ ,  $M\Omega = 1000K\Omega$
- Indication of resistance, which does not have one for rating electrical power, is as follows.


Pitch: 5 mm  
Rating electrical power 1/4W

- Chips resistors are 1/10W.
  -  : nonflammable resistor.
  -  : internal component.
  -  : panel designation, and adjustment for repair.
  - All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
  -  : earth-ground.
  -  : earth-chassis.
  -  : earth-chassis.
  - The components identified by  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation.
  - Should replacement be required, replace only with the value originally used.
  - When replacing components identified by  mark the necessary adjustments indicated. If results do not meet the specified value, change the component identified by  and repeat the adjustment until the specified value is achieved.
- (Refer to F581 and F583 on Page 28, 29 in the Service Manual.)
- When replacing the part in below table be sure to perform the related adjustment.

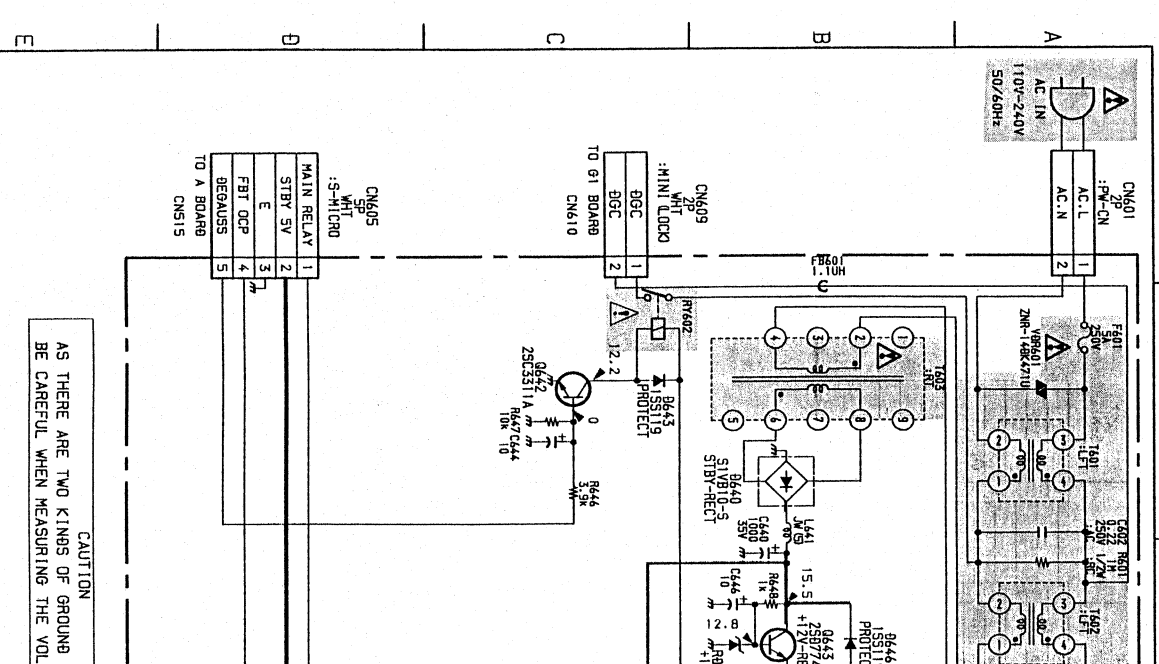
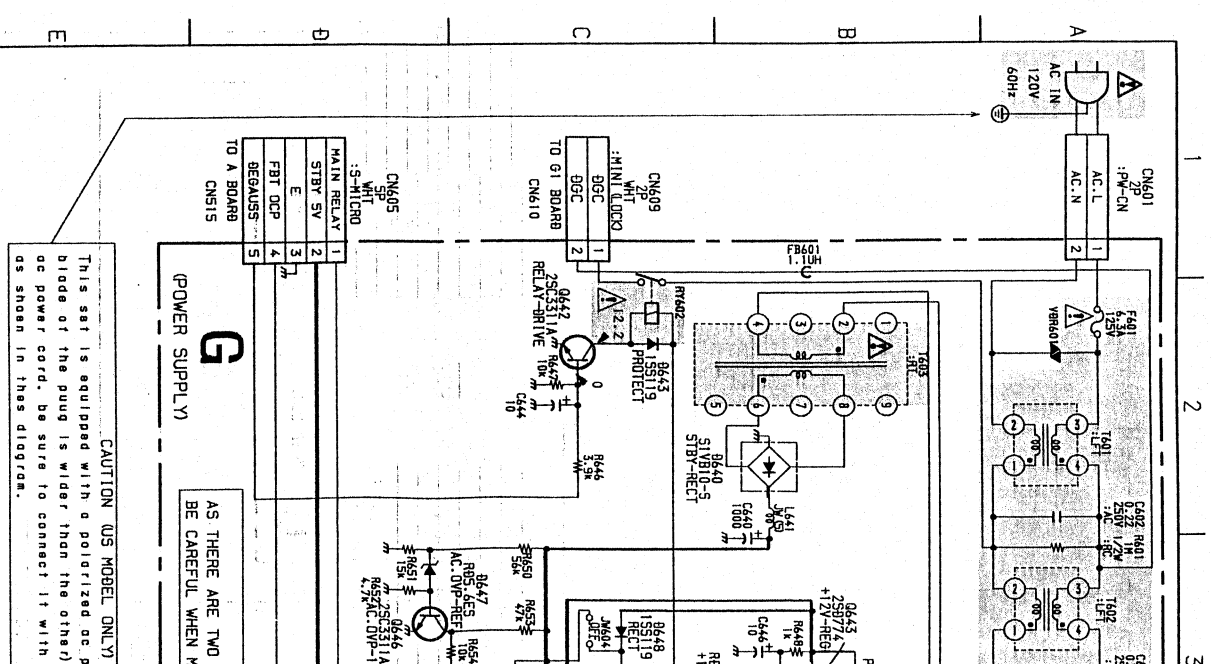
Part replaced (  )	Adjustment (  )
C574, D515, IC501, Q517, Q518, R578, R580, R581, R582, R583, R584, R585, T504..... A BOARD	R581 (HOLD-DOWN)
IC620 ..... G BOARD	
C574, D515, IC501, Q517, Q518, R578, R580, R581, R582, R583, R584, R585, T504..... A BOARD	R583 (HOLD-DOWN)
IC620 ..... G BOARD	

## Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FRPD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: ※	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

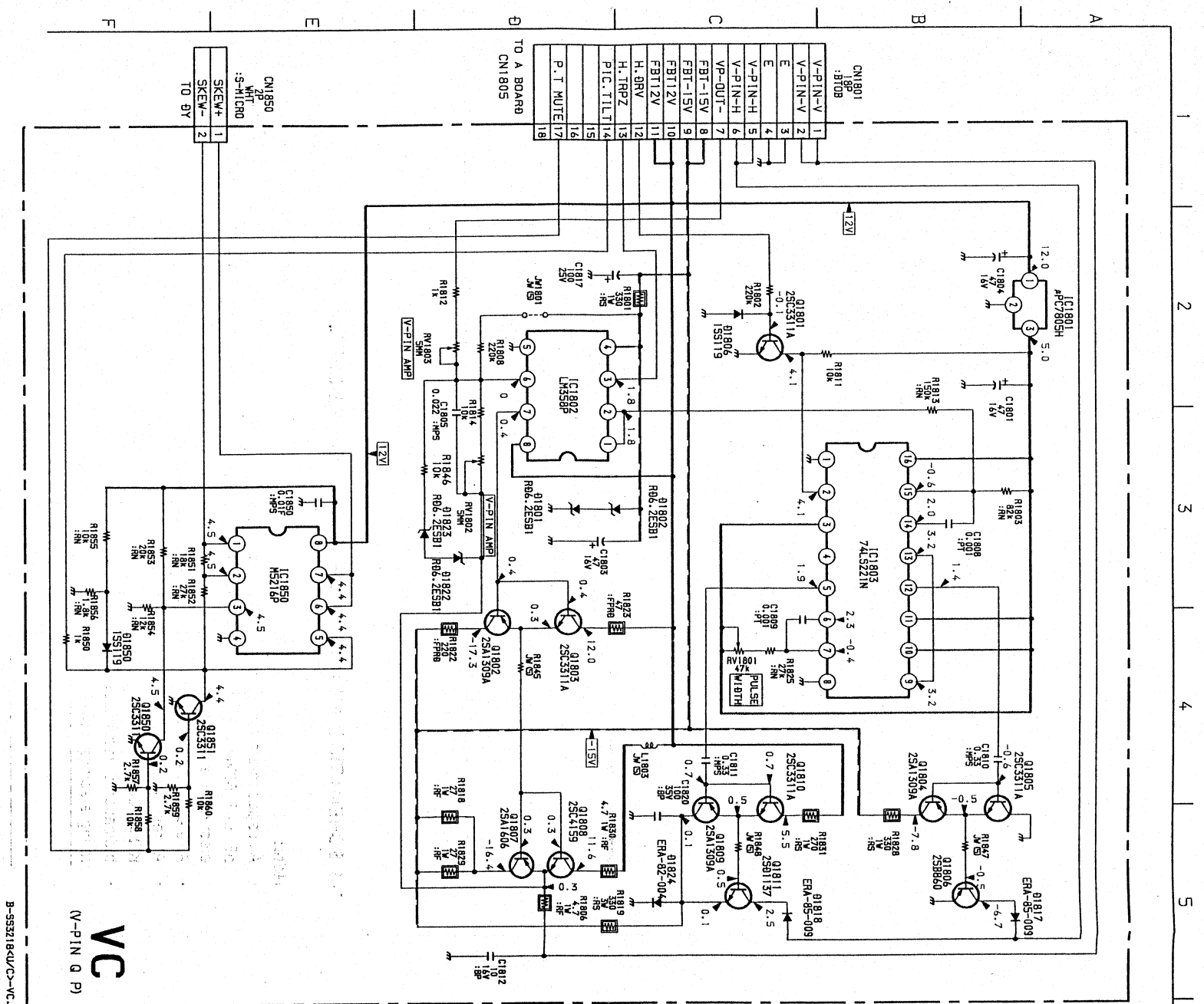
**Note:** The components identified by shading and main  are critical for safety. Replace only with part number specified.

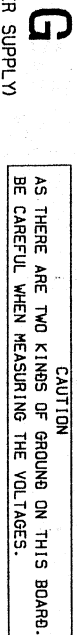
**Note:** Les composants identifiés par une trame  $\Delta$  sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié



VC BOARD

D1801	CLIP 2
D1802	CLIP 1
D1806	PROTECT
D1817	V PIN SW 1
D1818	V PIN SW 2
D1822	PIN GAMMA 1
D1823	PIN GAMMA 2
D1824	C SOURCE
D1850	MUTE SW
IC1801	5V REG
IC1802	VCC DRC
IC1803	V PIN DRV
IC1850	TILT CORR
Q1801	INVERT
Q1802	BUFE 2
Q1803	BUFE 1
Q1804	V PIN DRV 2
Q1805	V PIN DRV 1
Q1806	V PIN OUT 1
Q1807	VCC OUT 2
Q1808	VCC OUT 1
Q1809	V PIN DRV 4
Q1810	V PIN DRV 3
Q1811	V PIN OUT 2
Q1850	TILT SW
Q1851	TILT SW



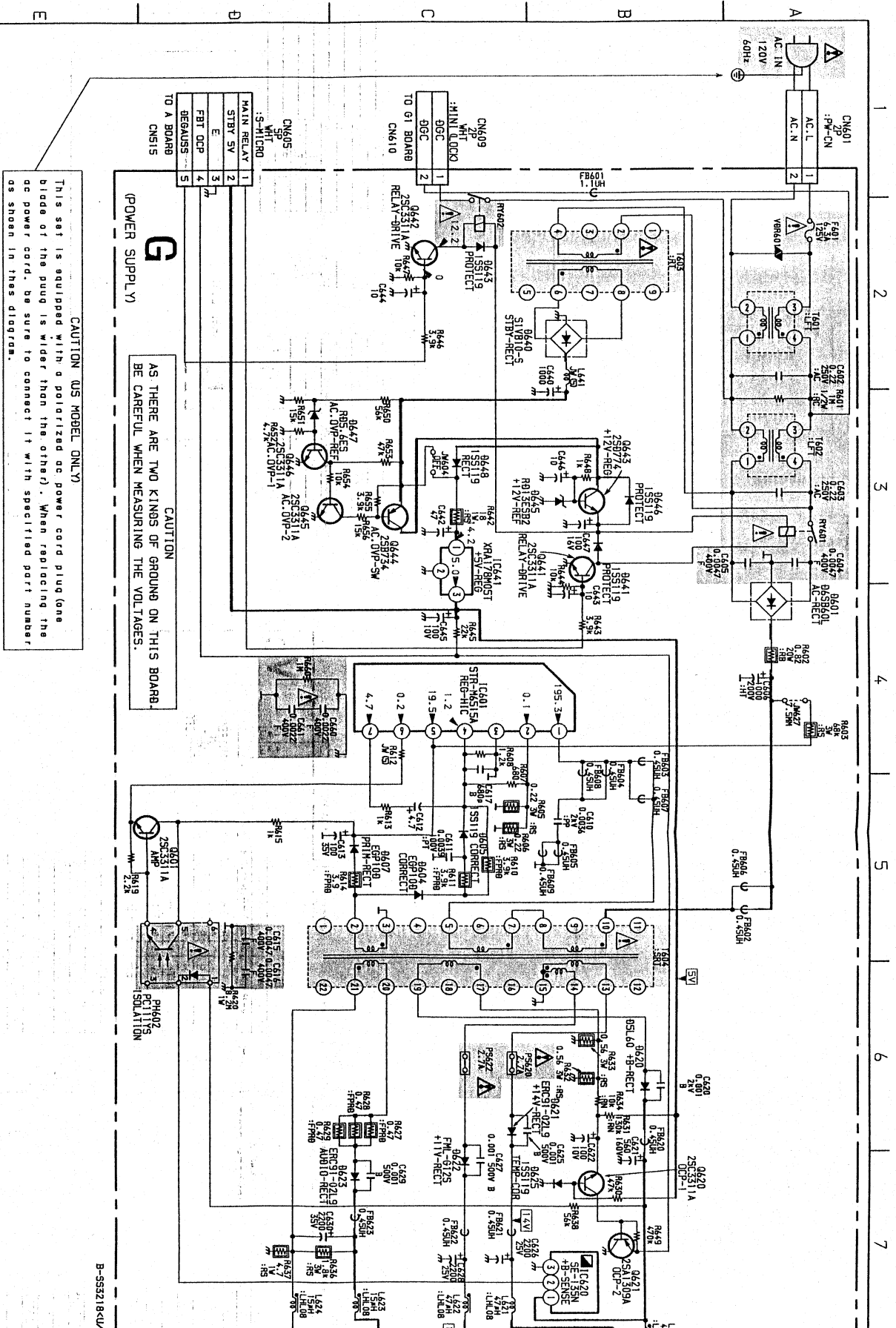


B-553218<U/C>-G.

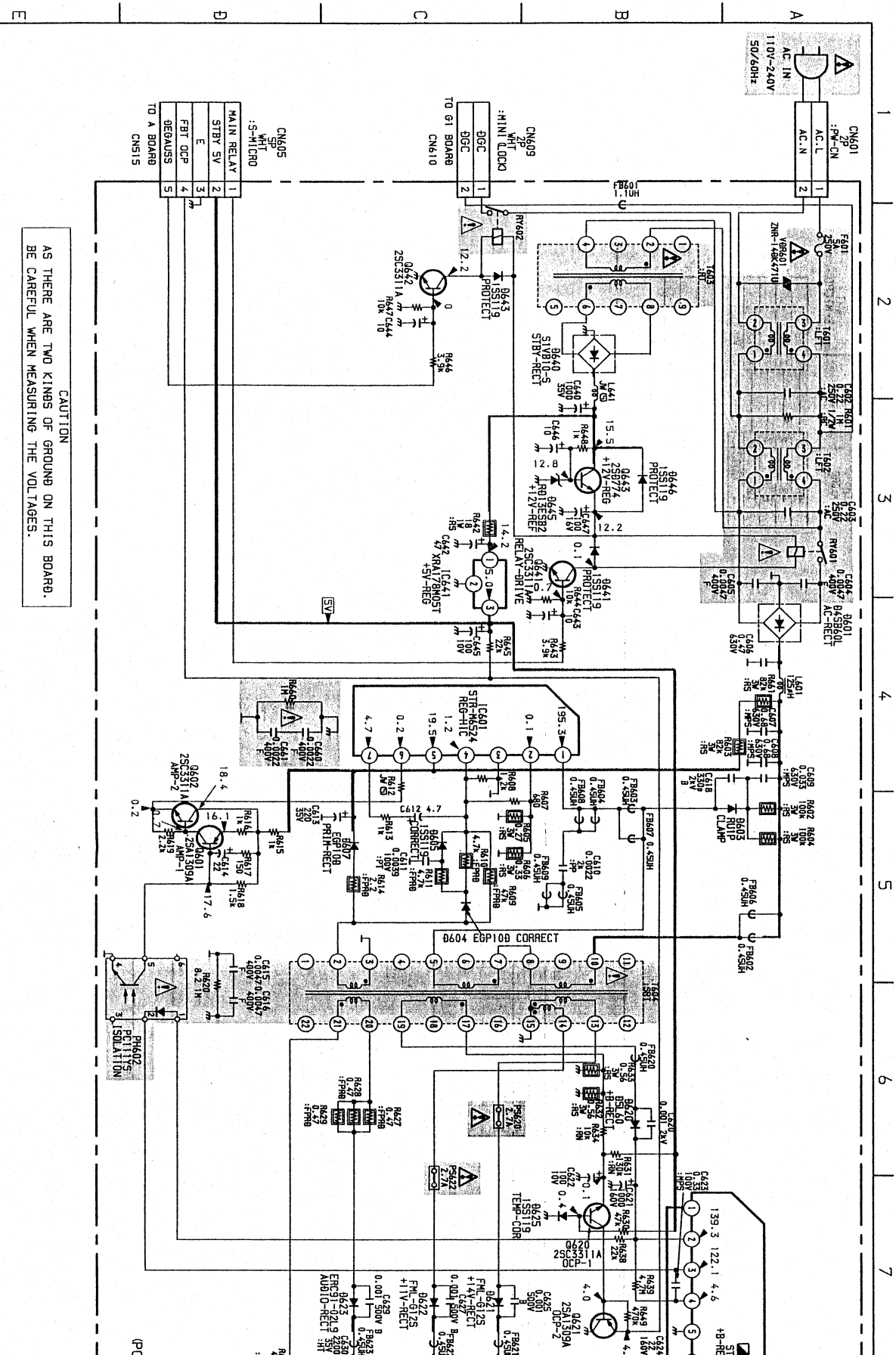


B-SS3218<AEP>-G.

(US, Canadian Model)



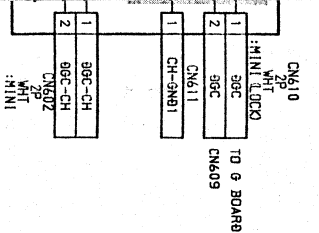
(AEP, AUS Model)



VC

(V-PIN Q P)

B-553218<U>C->VC.



E

D

B

A

1

2

3

4

5

6

7

5

2

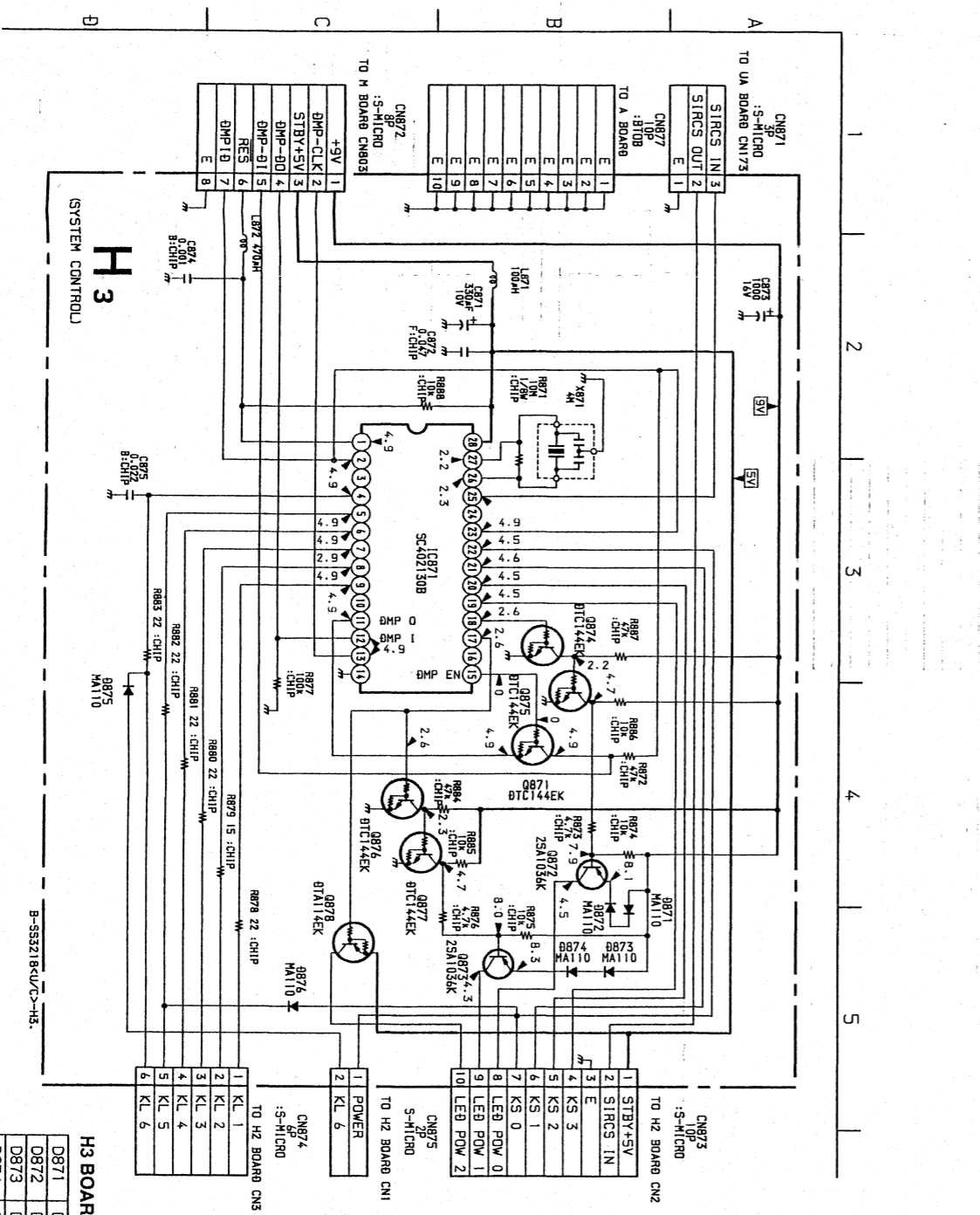
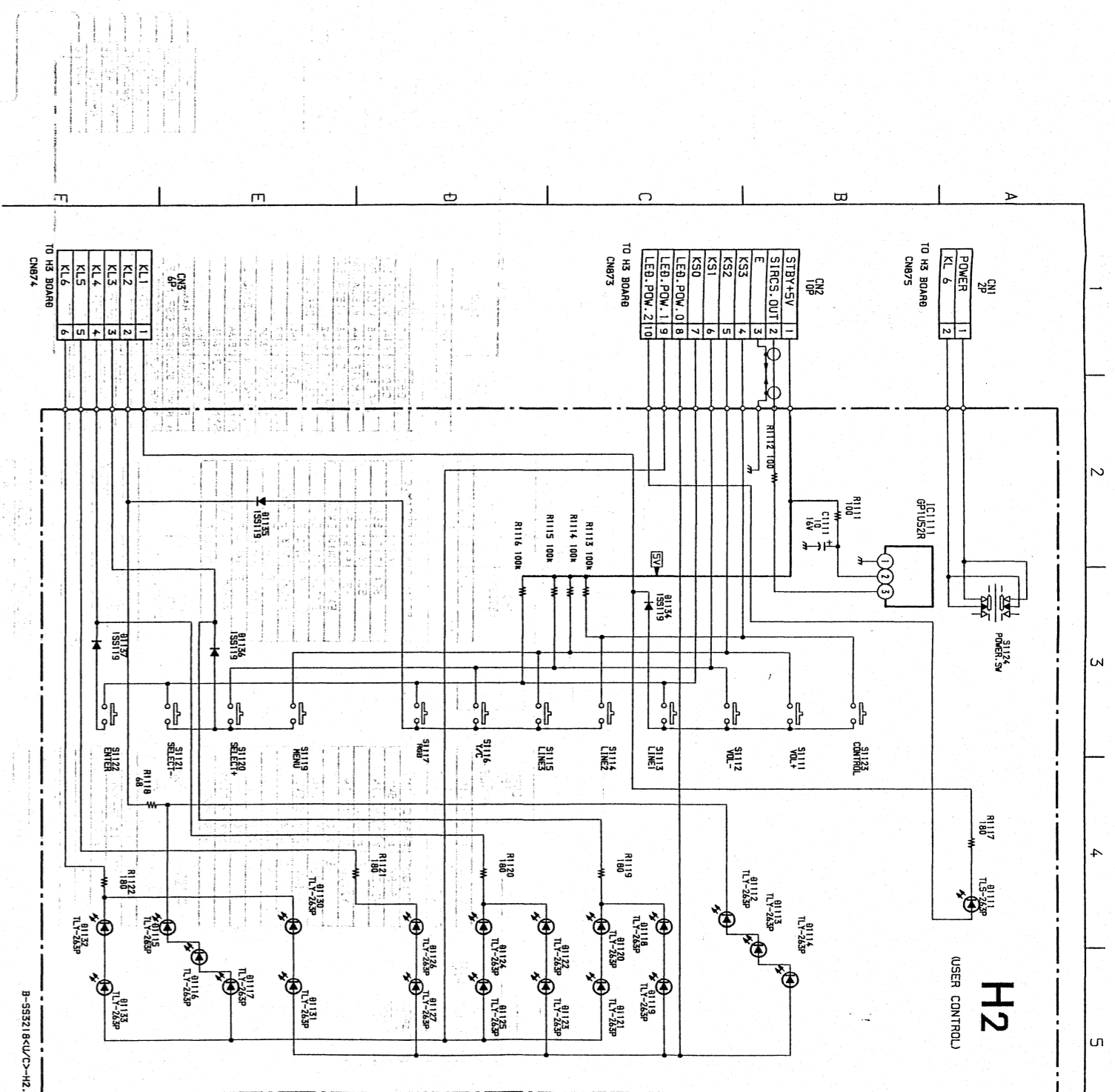
3

4

5

6

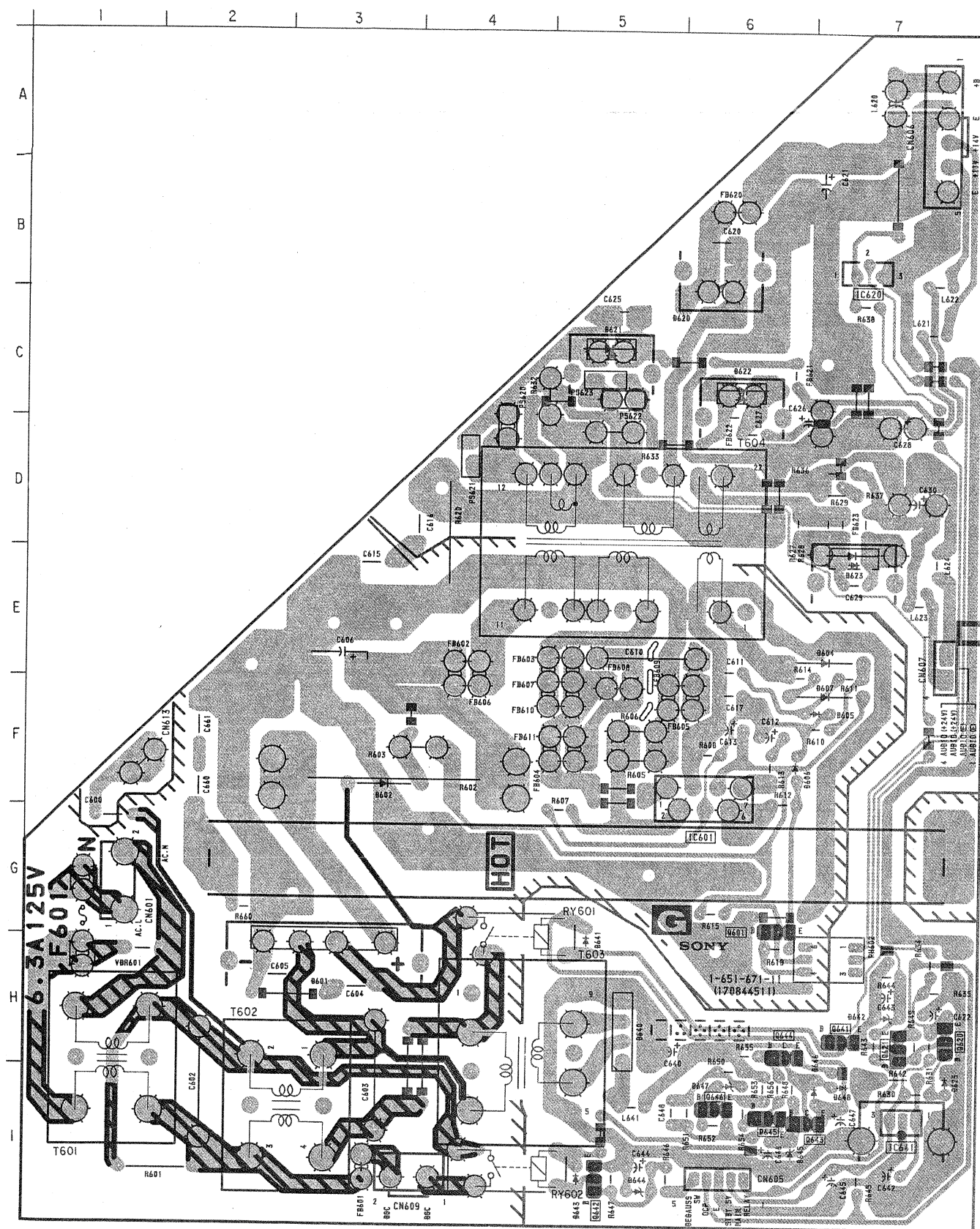
7



0871	DC SHIFT
0872	DC SHIFT
0873	DC SHIFT
0874	DC SHIFT
0875	KEY MATRIX
0876	KEY MATRIX
IC871	SUB MICRO
0871	INVERT
0872	LED DRIVER
0873	LED DRIVER
0874	INVERT
0875	INVERT
0876	INVERT
0877	INVERT
0878	LED DRIVER

**G** [POWER SUPPLY] **H3** [SYSTEM CONTROL] **G1** [DGC] **H2** [USER CONTROL] **VC** [V - PIN Q P]

- G BOARD - (US, Canadian Model)



# G BOARD

IC	
IC601	F - 6
IC620	B - 7
IC641	I - 7

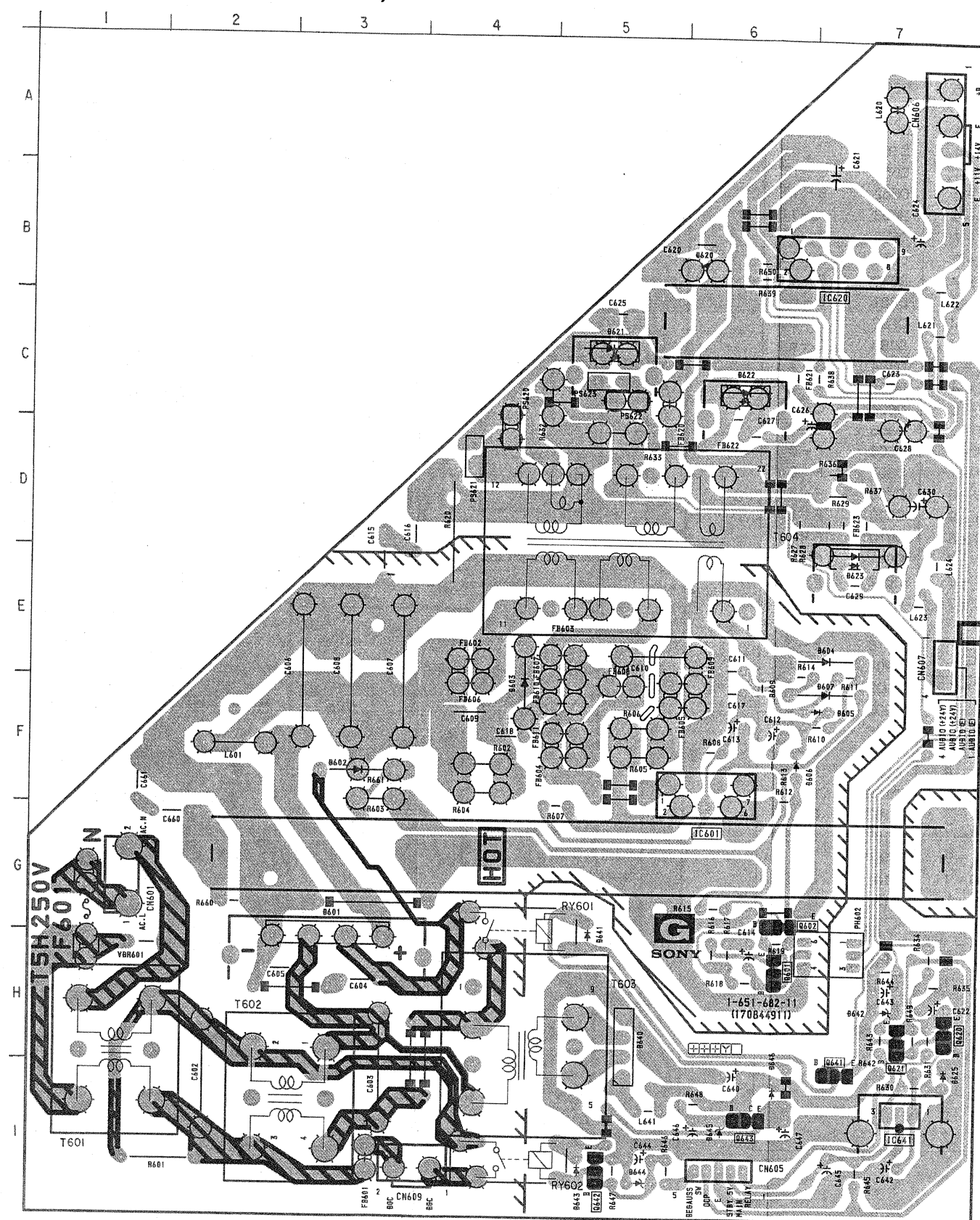
## TRANSISTOR

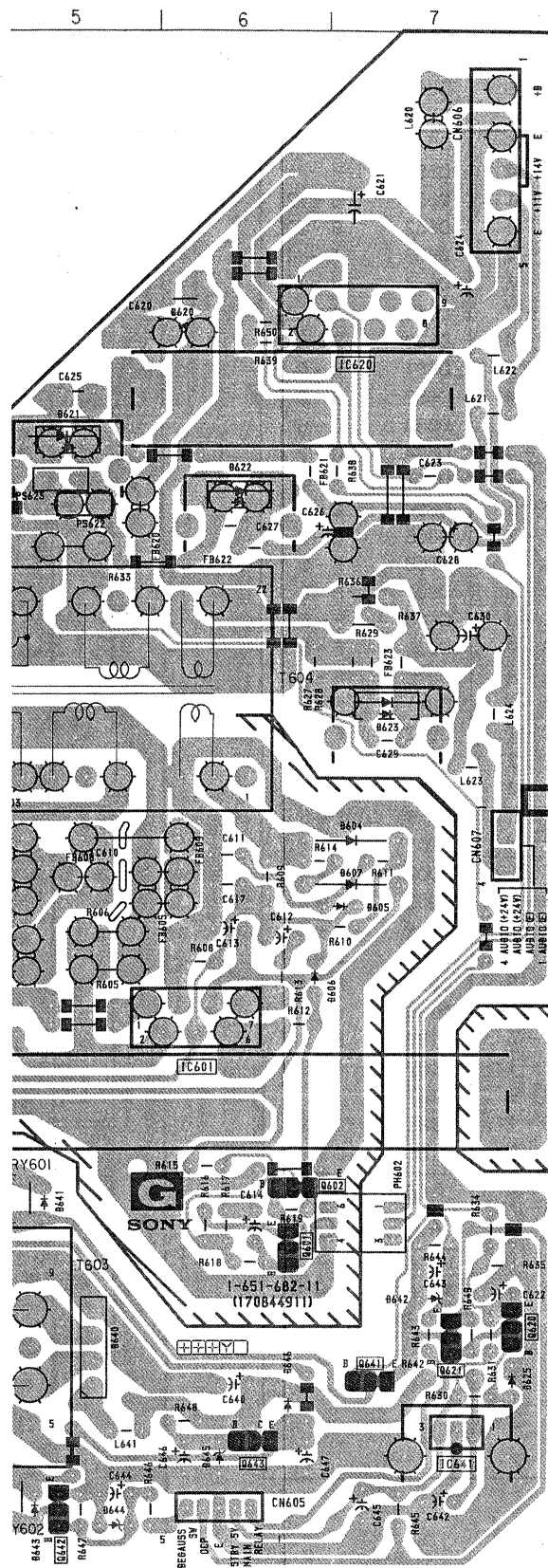
Q601	G - 6
Q620	H - 7
Q621	H - 7
Q641	H - 7
Q642	I - 5
Q643	I - 6
Q644	H - 6
Q645	I - 6
Q646	I - 6

## DIODE

D601	H - 3
D604	E - 7
D605	F - 7
D607	F - 7
D620	B - 6
D621	C - 5
D622	C - 6
D623	E - 7
D625	I - 7
D640	H - 5
D641	G - 5
D643	I - 5
D645	I - 6
D646	I - 7
D647	I - 6
D648	I - 7

- G BOARD - (AEP, AUS Model)

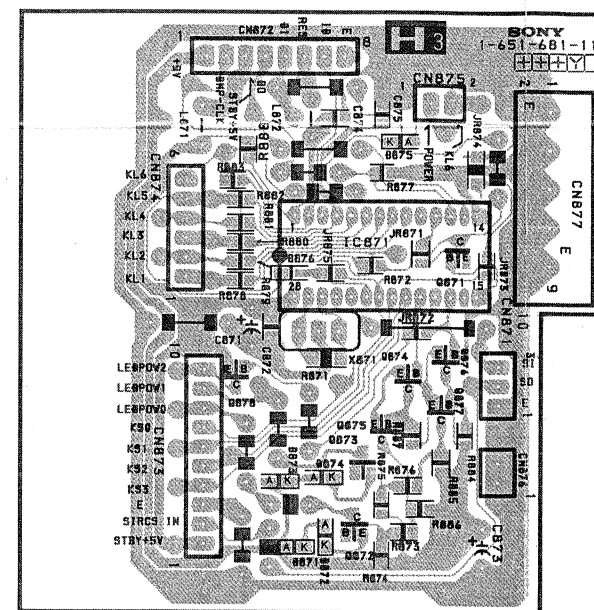




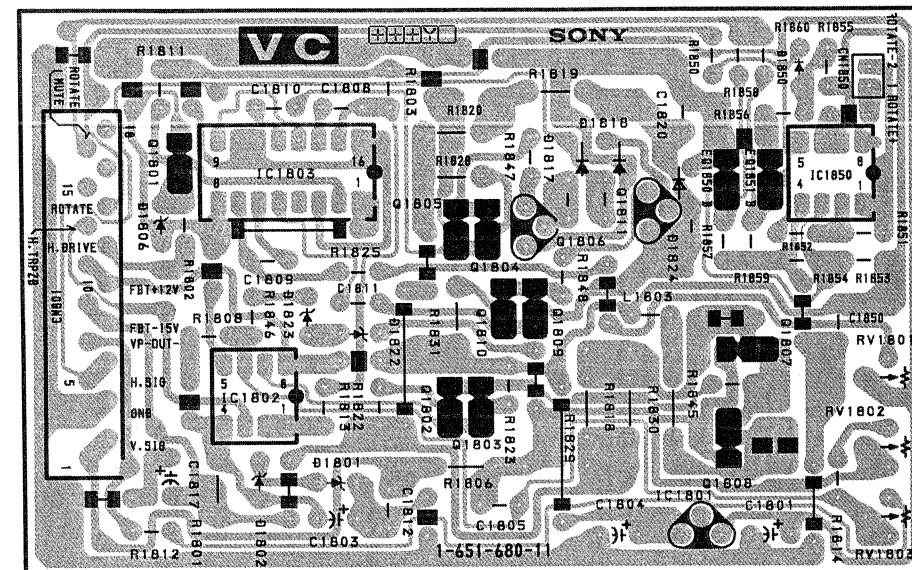
# G BOARD

IC	
IC601	F-6
IC620	B-7
IC641	I-7
TRANSISTOR	
Q601	H-6
D602	G-6
Q620	H-7
Q621	H-7
Q641	I-7
Q642	I-5
Q643	I-6
DIODE	
D601	H-3
D603	F-4
D604	E-7
D605	F-7
D607	F-7
D620	B-6
D621	C-5
D622	C-6
D623	E-7
D625	I-7
D640	H-5
D641	G-5
D643	I-5
D645	I-6
D646	I-6

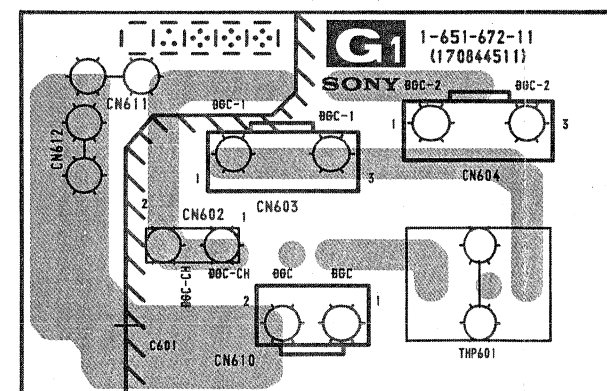
## - H3 BOARD -



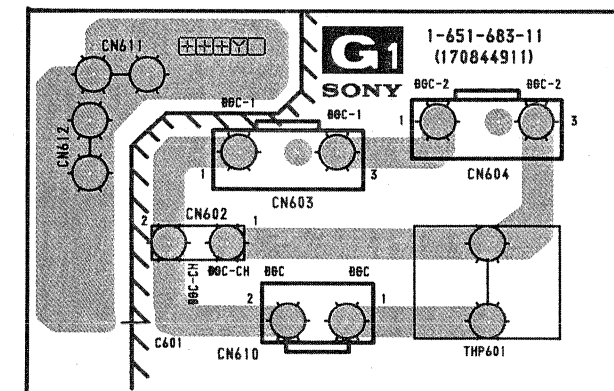
## - VC BOARD -



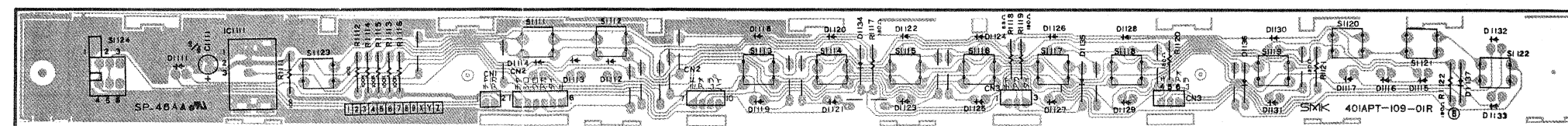
## - G1 BOARD - (US, Canadian Model)



## - G1 BOARD - (AEP, AUS Model)

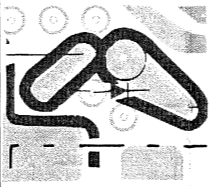


## - H2 BOARD -

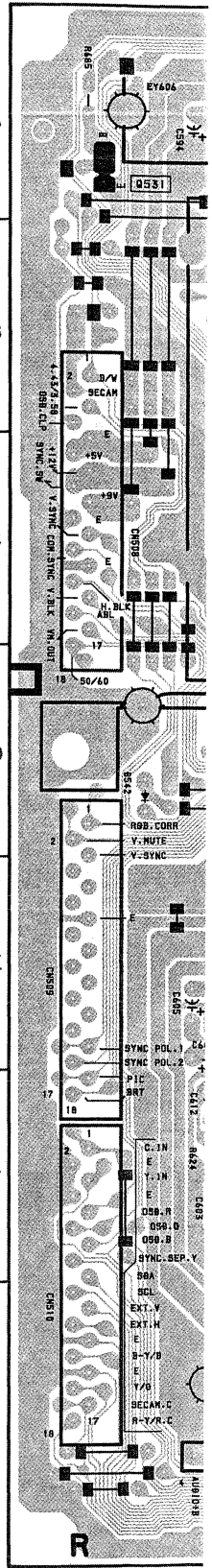


A BOARD

IC		Q808	F - 5	D532	E - 2
IC501	D - 7	Q809	G - 6	D533	B - 3
IC502	A - 10	Q810	G - 6	D534	C - 3
IC503	C - 11	Q811	F - 6	D535	D - 3
IC504	C - 5	Q901	E - 4	D542	D - 1
IC505	E - 2	Q902	F - 4	D550	
IC506	A - 2	Q903	F - 4	D650	C - 12
IC507	A - 8	Q904	F - 4	D652	B - 10
IC508	B - 4	Q905	C - 4	D653	A - 11
IC510	A - 4	Q806	F - 7	D654	A - 11
IC511	B - 2	Q907	F - 7	D655	A - 11
IC512	C - 12	Q908	G - 4	D680	B - 6
IC802	E - 6	Q909	D - 3	D681	B - 6
IC803	G - 6	Q910	G - 4	D682	B - 6
IC901	E - 4	Q911	D - 4	D683	C - 6
IC903	D - 4	Q912	D - 4	D684	C - 7
IC1601	B - 7	Q913	E - 4	D801	F - 5
IC1603	A - 5	Q914	F - 5	D804	G - 4
IC1604	B - 9	Q1604	B - 7	D805	G - 4
IC1605	A - 9	Q1605	A - 7	D806	F - 5
TRANSISTOR		Q1606	B - 7	D807	F - 6
Q504	C - 10	Q1670	B - 9	D808	F - 5
Q505	D - 10	Q1671	B - 9	D809	F - 5
Q506	D - 11	Q1672	B - 8	D810	F - 5
Q508	B - 11	Q1673	A - 7	D811	G - 5
Q509	B - 11	Q1674	C - 7	D812	F - 6
Q510	A - 11	Q1675	C - 7	D813	C - 4
Q511	C - 11	Q1676	C - 7	D814	E - 5
Q512	B - 11	DIODE		D816	E - 5
Q513	C - 10	D505	C - 10	D901	E - 4
Q514	C - 11	D506	B - 11	D902	F - 4
Q515	C - 11	D507	B - 11	D903	F - 4
Q516	G - 7	D508	F - 7	D906	F - 4
Q517	A - 4	D509	G - 8	D907	D - 4
Q518	A - 4	D510	F - 11	D908	F - 4
Q519	C - 4	D511	F - 7	D1601	B - 7
Q520	C - 2	D512	G - 12	D1670	B - 9
Q521	C - 2	D513	E - 9	D1671	B - 9
Q522	C - 2	D515	G - 11	D1672	
Q523	C - 3	D516	E - 10	D1810	D - 8
Q530	B - 11	D517	B - 10	D1811	D - 8
Q531	A - 1	D519	B - 11	VARIABLE RESISTOR	
Q532	A - 5	D520	D - 5	RV1601	B - 7
Q801	E - 6	D521	C - 10	RV1602	A - 8
Q802	F - 5	D522	C - 9	RV1603	A - 7
Q803	E - 5	D523	F - 11		
Q804	F - 6	D524	C - 9		
Q805	E - 5	D525	C - 11		
Q806	F - 6	D526	B - 11		
Q807	F - 6	D530	E - 2		
		D531	E - 2		



**NOTE:**  
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.



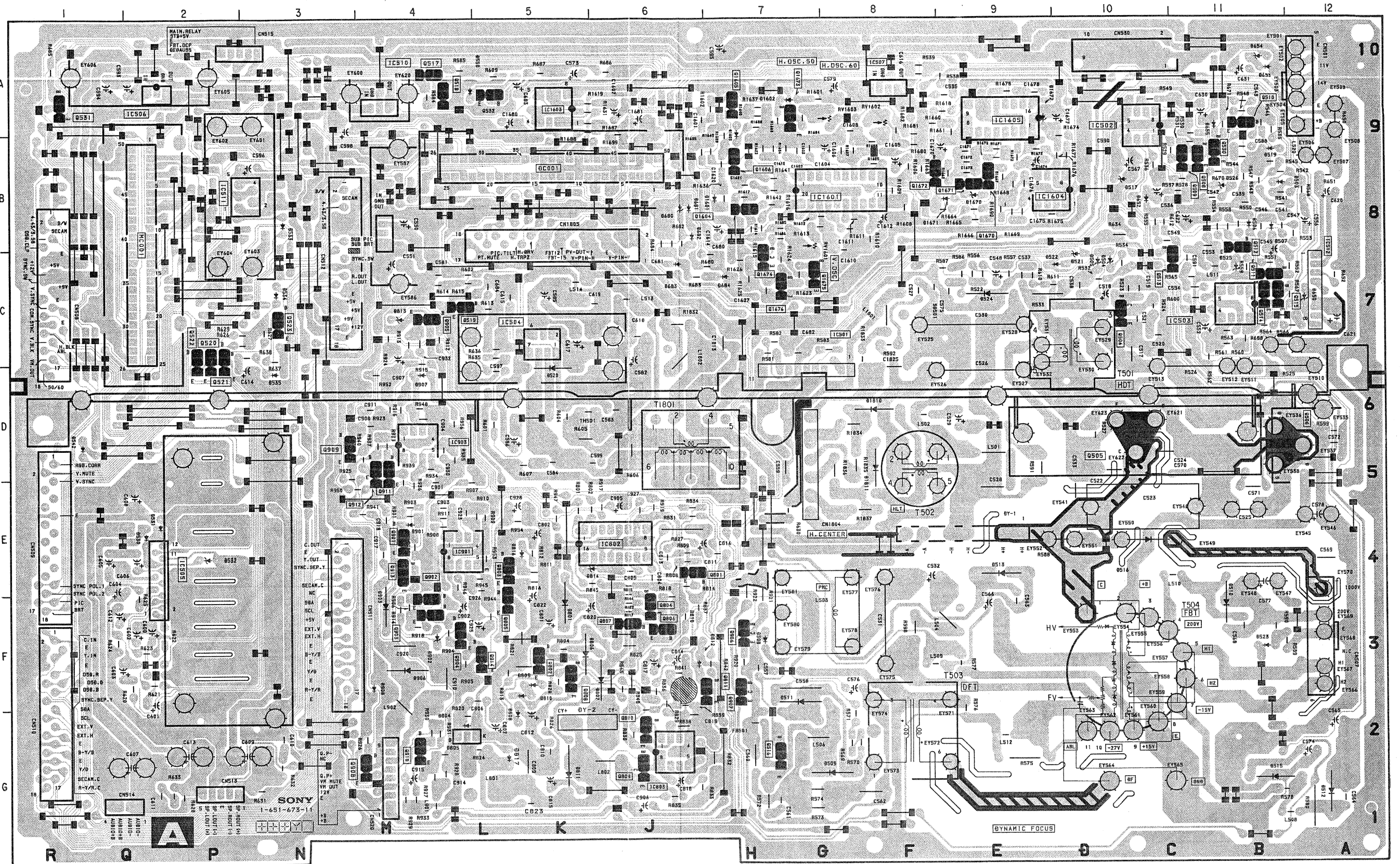
# A

– A BOARD –

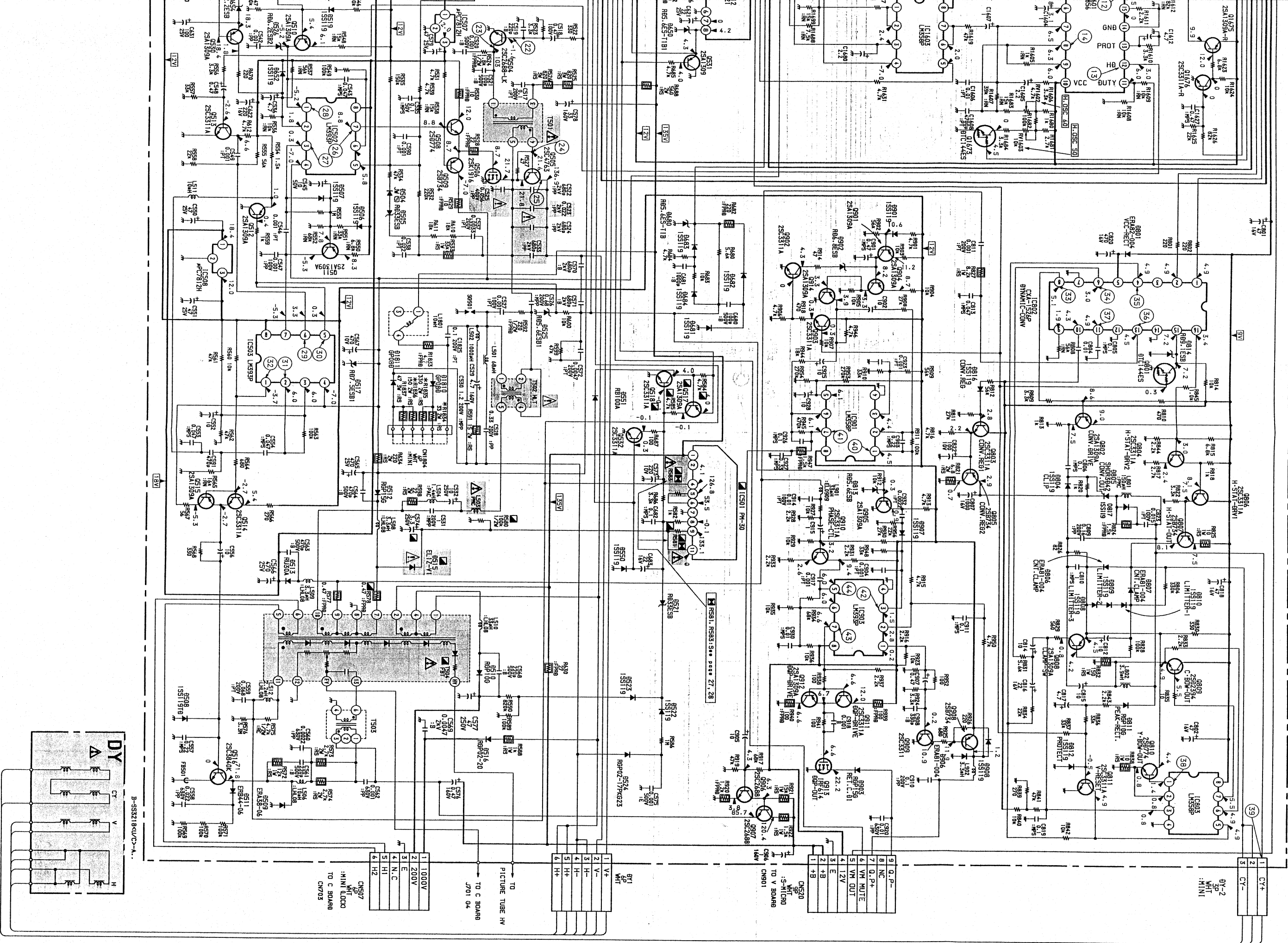
D532	E - 2
D533	B - 3
D534	C - 3
D535	D - 3
D542	D - 1
D550	
D650	C - 12
D652	B - 10
D653	A - 11
D654	A - 11
D655	A - 11
D680	B - 6
D681	B - 6
D682	B - 6
D683	C - 6
D684	C - 7
D801	F - 5
D804	G - 4
D805	G - 4
D806	F - 5
D807	F - 6
D808	F - 5
D809	F - 5
D810	F - 5
D811	G - 5
D812	F - 6
D813	C - 4
D814	E - 5
D816	E - 5
D901	E - 4
D902	F - 4
D903	F - 4
D906	F - 4
D907	D - 4
D908	F - 4
D1601	B - 7
D1670	B - 9
D1671	B - 9
D1672	
D1810	D - 8
D1811	D - 8

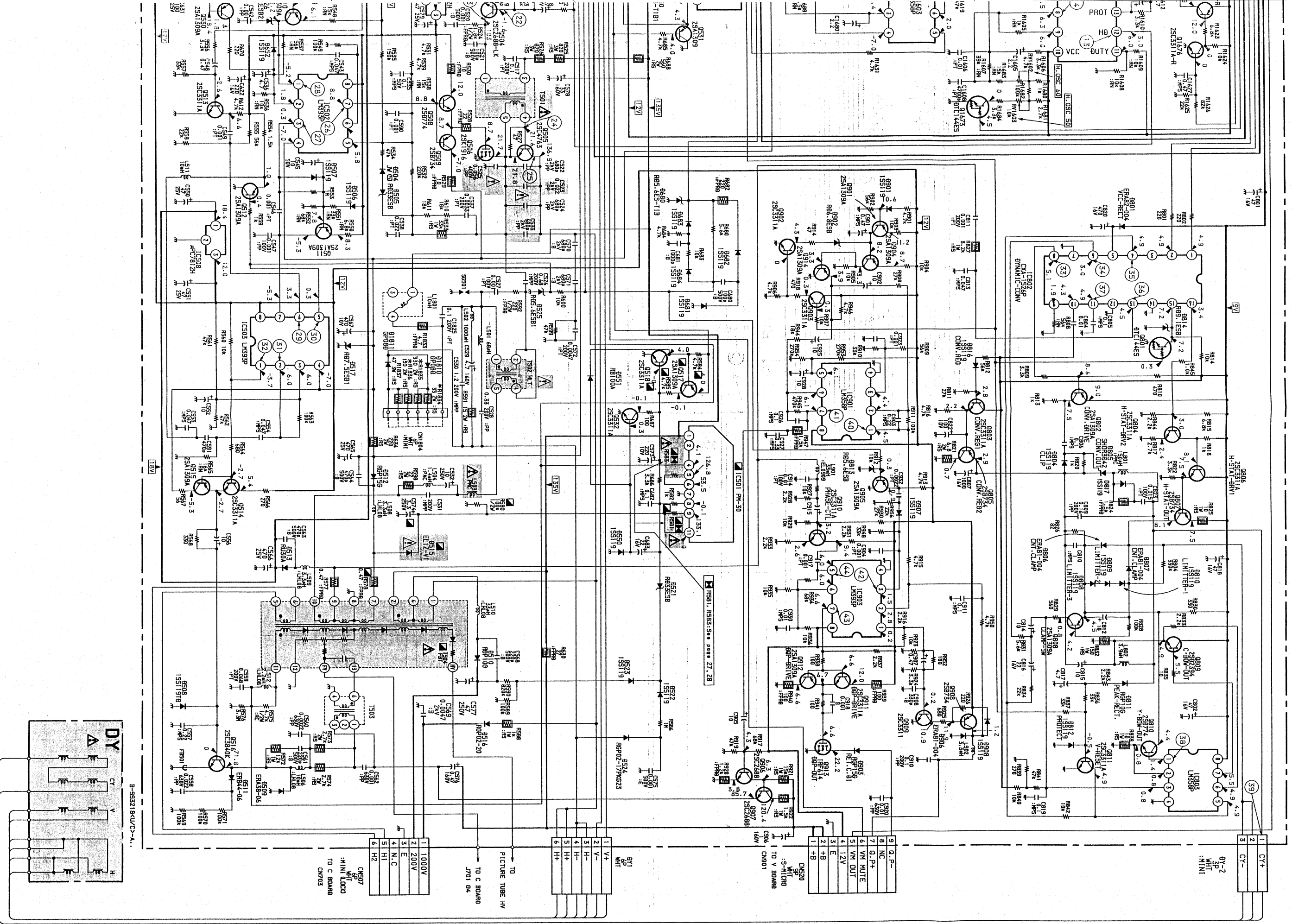
VARIABLE  
RESISTOR

RV1601	B - 7
RV1602	A - 8
RV1603	A - 7









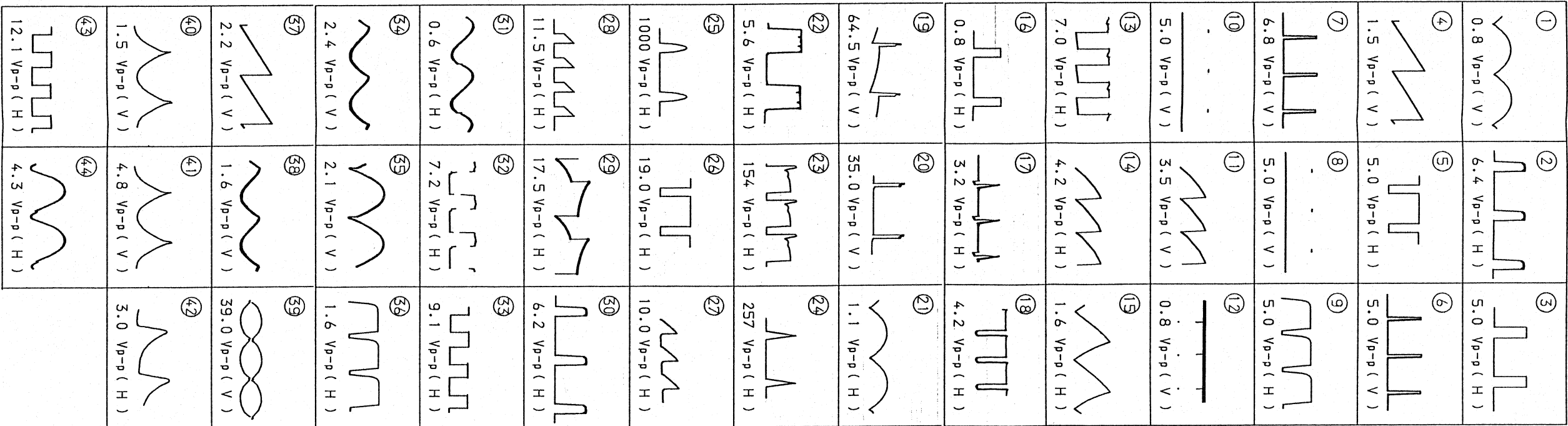
A BOARD

- ① 0.8 Vp-p
- ④ 1.5 Vp-p
- ⑦ 6.8 Vp-p
- ⑩ 5.0 Vp-p
- ⑬ 7.0 Vp-p
- ⑯ 0.8 Vp-p
- ⑰ 64.5 Vp-p
- ⑱ 5.6 Vp-p
- ⑲ 1000 Vp-p
- ⑳ 11.5 Vp-p
- ㉑ 0.6 Vp-p
- ㉒ 2.4 Vp-p
- ㉓ 1.5 Vp-p
- ㉔ 12.1 Vp-p

A BOARD :

Ref. No.	Location
R1834	H-11
R1835	H-11
R1836	H-11

• A BOARD WAVEFORMS

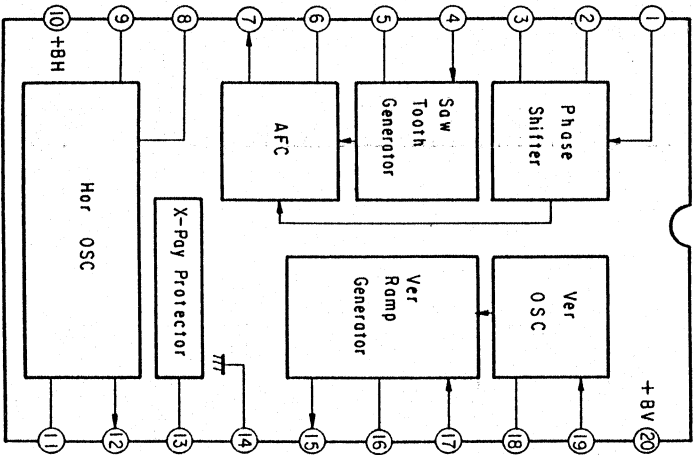


A BOARD

D505	LIMITER	IC508	12V REG
D506	TEMP CORR	IC510	5V REG
D507	CLAMP	IC511	9V REG
D508	PROTECT	IC512	+ B PROTECT
D509	DE AMP	IC802	D YNAMIC CONV
D510	200V RECT	IC803	F.BOP AMP
D511	SNUBBER	IC901	V PARA OUT
D512	-15V RECT	IC903	DOP DRV
D513	15V RECT	IC1601	SYNC OSC
D515	120V RECT	IC1603	AFC CORR
D516	G2 RECT	IC1604	H SFT OUT
D517	REF VOLT	IC1605	H SFT OUT
D519	TEMP CORR		
D520	V BOOST	0504	H DRIVE
D521	PROTECT 4	0505	H OUT
D522	PROTECT 5	0506	PIN OUT
D523	PROTECT 6	0508	PIN DRV
D524	PEAK RECT	0509	PIN DRV
D525	H BLK 1	0510	C SPLY
D526	DC SHIFT	0511	I SOURCE
D530	PROTECT	0512	H PLS
D531	PROTECT	0513	INVERT
D532	PROTECT	0514	DE OUT 1
D533	SW	0515	DE OUT 2
D534	SW	0516	DE OUT
D535	SW	0517	PROTECT 1
D542	ABL SW	0518	PROTECT 2
D550	SW	0519	V BLK OUT
D650	PROTECT	0520	MUTE
D652	PROTECT	0521	MUTE
D653	HOLD	0522	PROTECT
D654	VOLT DROP	0523	PROTECT
D655	RETURN	0530	PROTECT
D690	H BLK 2	0531	PROTECT SW
D681	RECT	0532	PROTECT 3
D682	FP SW	0801	H SYNC SW
D683	SW	0802	CONV DRIVE
D684	BP RECT	0803	CONV REG 1
D801	VCC RECT	0804	H STAT DRV 2
D804	CLIP	0805	CONV REG 2
D805	CONT OUT	0806	J STAT DRV 1
D806	CNT CLAMP	0807	H STAT OUT
D807	CNT CLAMP	0808	CLAMP SW
D808	LIMITER 3	0809	C BOW OUT
D809	LIMITER 2	0810	Y, BOW OUT
D810	LIMITER 1	0811	V RESET
D811	PEAK RECT	0901	C SPLY
D812	PROTECT	0902	V PULSE SW
D813	PLS CLIP	0903	BUFF
D814	PROTECT	0904	V SAW OUT
D816	CONV REG	0905	PLS OUT
D901	C SPLY	0906	DE SOURCE 1
D902	5.8V CLAMP	0907	DE SOURCE 2
D903	RET C DI	0908	OP V OUT
D906	OP V OUT	0909	OP V DRV
D907	S SAW SW	0910	PHASE CTL
D908	OP V OUT	0911	DOP DRIVE
D1601	SYNC FILTER	0912	DOP DRIVE
D1610	PROTECT	0913	DOP OUT
D1671	PROTECT	0914	V SAW OUT
D1672	REF VOLT	01604	V SYNC OUT
D1810	H CENT 1	01605	SYNC DRIVE
D1811	H CENT 2	01606	SYNC DRIVE
		01670	H S DRV
IC501	HV PROTECT	01671	CURR OUT
IC502	PIN CORR	01672	PROTECT
IC503	DE DRV	01673	EV SW
IC504	V OUT	01674	FV SW
IC505	AUDIO AMP	01675	SYNC SW
IC506	12V REG	01676	SYNC SW
IC507	12V REG		

D505	LIMITER	IC508	12V REG
D506	TEMP CORR	IC510	5V REG
D507	CLAMP	IC511	9V REG
D508	PROTECT	IC512	+ B PROTECT
D509	DE AMP	IC802	D YNAMIC CONV
D510	200V RECT	IC803	F.BOP AMP
D511	SNUBBER	IC901	V PARA OUT
D512	-15V RECT	IC903	DOP DRV
D513	15V RECT	IC1601	SYNC OSC
D515	120V RECT	IC1603	AFC CORR
D516	G2 RECT	IC1604	H SFT OUT
D517	REF VOLT	IC1605	H SFT OUT
D519	TEMP CORR		
D520	V BOOST	0504	H DRIVE
D521	PROTECT 4	0505	H OUT
D522	PROTECT 5	0506	PIN OUT
D523	PROTECT 6	0508	PIN DRV
D524	PEAK RECT	0509	PIN DRV
D525	H BLK 1	0510	C SPLY
D526	DC SHIFT	0511	I SOURCE
D530	PROTECT	0512	H PLS
D531	PROTECT	0513	INVERT
D532	PROTECT	0514	DE OUT 1
D533	SW	0515	DE OUT 2
D534	SW	0516	DE OUT
D535	SW	0517	PROTECT 1
D542	ABL SW	0518	PROTECT 2
D550	SW	0519	V BLK OUT
D650	PROTECT	0520	MUTE
D652	PROTECT	0521	MUTE
D653	HOLD	0522	PROTECT
D654	VOLT DROP	0523	PROTECT
D655	RETURN	0530	PROTECT
D690	H BLK 2	0531	PROTECT SW
D681	RECT	0532	PROTECT 3
D682	FP SW	0801	H SYNC SW
D683	SW	0802	CONV DRIVE
D684	BP RECT	0803	CONV REG 1
D801	VCC RECT	0804	H STAT DRV 2
D804	CLIP	0805	CONV REG 2
D805	CONT OUT	0806	J STAT DRV 1
D806	CNT CLAMP	0807	H STAT OUT
D807	CNT CLAMP	0808	CLAMP SW
D808	LIMITER 3	0809	C BOW OUT
D809	LIMITER 2	0810	Y, BOW OUT
D810	LIMITER 1	0811	V RESET
D811	PEAK RECT	0901	C SPLY
D812	PROTECT	0902	V PULSE SW
D813	PLS CLIP	0903	BUFF
D814	PROTECT	0904	V SAW OUT
D816	CONV REG	0905	PLS OUT
D901	C SPLY	0906	DE SOURCE 1
D902	5.8V CLAMP	0907	DE SOURCE 2
D903	RET C DI	0908	OP V OUT
D906	OP V OUT	0909	OP V DRV
D907	S SAW SW	0910	PHASE CTL
D908	OP V OUT	0911	DOP DRIVE
D1601	SYNC FILTER	0912	DOP DRIVE
D1610	PROTECT	0913	DOP OUT
D1671	PROTECT	0914	V SAW OUT
D1672	REF VOLT	01604	V SYNC OUT
D1810	H CENT 1	01605	SYNC DRIVE
D1811	H CENT 2	01606	SYNC DRIVE
		01670	H S DRV
IC501	HV PROTECT	01671	CURR OUT
IC502	PIN CORR	01672	PROTECT
IC503	DE DRV	01673	EV SW
IC504	V OUT	01674	FV SW
IC505	AUDIO AMP	01675	SYNC SW
IC506	12V REG	01676	SYNC SW
IC507	12V REG		

A BOARD IC1601 LA7856



A BOARD \* MARK

Ref. No.	Location	PVM-2950QM (U/C)	PVM-2950QM (AUS)
R1834	H-11	33 2W: RS	0.22 2W: RS
R1835	H-11	330 2W: RS	100 2W: RS
R1836	H-11	150 2W: RS	330 2W: RS

B BOARD

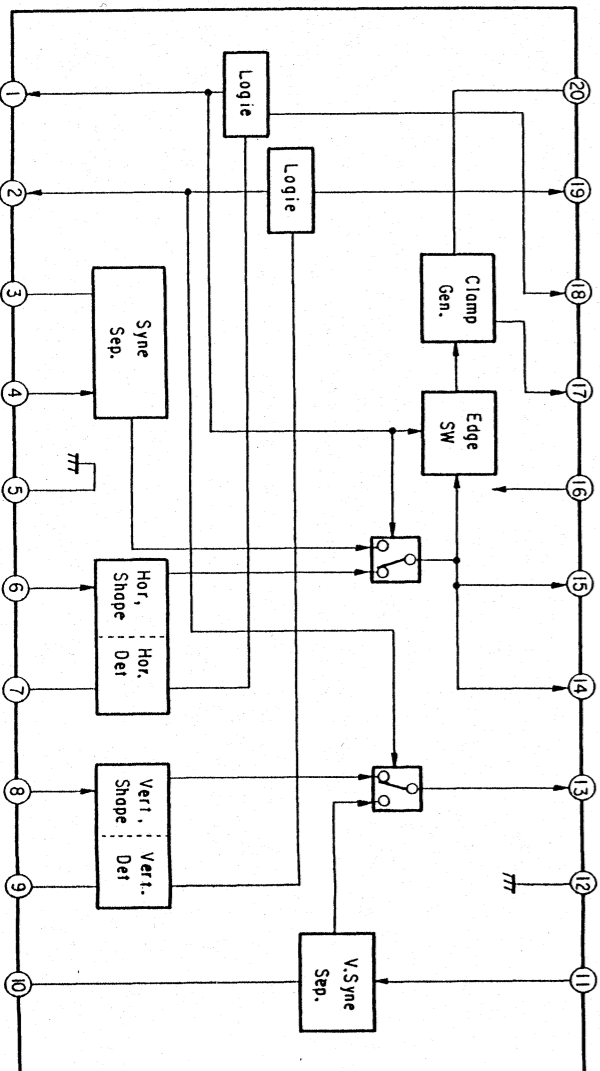
D303	PROTECT
D304	B/W SW
D306	B/W SW
D307	B/W SW
D308	PAL SW
D309	SECAM KILLEY SW
D310	PAL SW
D311	PAL SW
D312	PROTECT
D317	PIC ABL
D318	PROTECT
D319	PROTECT
D320	PROTECT
D321	PROTECT
D322	PROTECT
D323	PROTECT
D324	PROTECT
D325	PROTECT
D326	PROTECT
D327	PROTECT
D328	PROTECT
D329	PROTECT
D331	SYSTEM SW
D332	PROTECT
D333	PROTECT
D334	BLK SW
D335	BLK SW
D336	PROTECT
D337	NO SIGNAL SW
IC301	VIDEO SW
IC302	SYNC SW
IC303	SECAM DECODER
IC304	PAL/SECAM SW
IC305	SYSTEM SW
IC306	NT/PAL DECODER
IC307	PULSE GENERATOR
IC308	SYNC SEP
IC309	B/W DETECT
IC310	SYSTEM SW
IC311	D/A CONVERTER
IC312	RGB DECODER
IC313	VIDEO SW
IC316	D/A CONVERTER
IC318	EX OR
IC319	BLUE ONLY SW
IC320	AGING SW
Q301	C BUFF
Q302	Y BUFF
Q303	Y BUFF
Q304	Y BUFF

Q305	Y AMP
Q306	Y BUFF
Q307	Y BUFF
Q308	C BUFF
Q309	C BUFF
Q311	B-Y BUFF
Q312	B-Y BUFF
Q313	PAL SW
Q314	R-Y BUFF
Q315	B-Y BUFF
Q316	14M SW
Q317	17M SW
Q318	VCXO BUFF
Q319	R-Y BUFF
Q320	B-Y BUFF
Q321	Y BUFF
Q322	INVERT
Q323	V SYNC SEP
Q324	Y BUFF
Q325	INVERT
Q326	INVERT
Q327	SYNC SEP
Q328	SYNC BUFF
Q329	CLAMP
Q330	CLAMP
Q331	Y AMP
Q332	VM AMP
Q333	ABL BUFF
Q334	ABL AMP
Q335	ABL
Q336	PIC ABL
Q337	BRT ABL
Q338	R BUFF
Q339	R BUFF
Q340	G BUFF
Q341	G BUFF
Q342	B BUFF
Q343	B GATE SW
Q344	INVERT
Q345	SECAM KILLER
Q346	RGB CORR
Q347	NT/PAL SW
Q348	INVERT
Q349	443/358 SW
Q350	VCXO BUFF
Q351	B GATE SW
Q352	INVERT
Q353	INVERT
Q354	B-Y BUFF
Q355	R-Y BUFF
Q356	MATRIX SW
Q357	Y BUFF
Q358	SW
Q359	BLK SW
Q360	B GATE SW
Q361	NO SIGNAL SW
Q362	
Q363	

B BOARD \* MARK

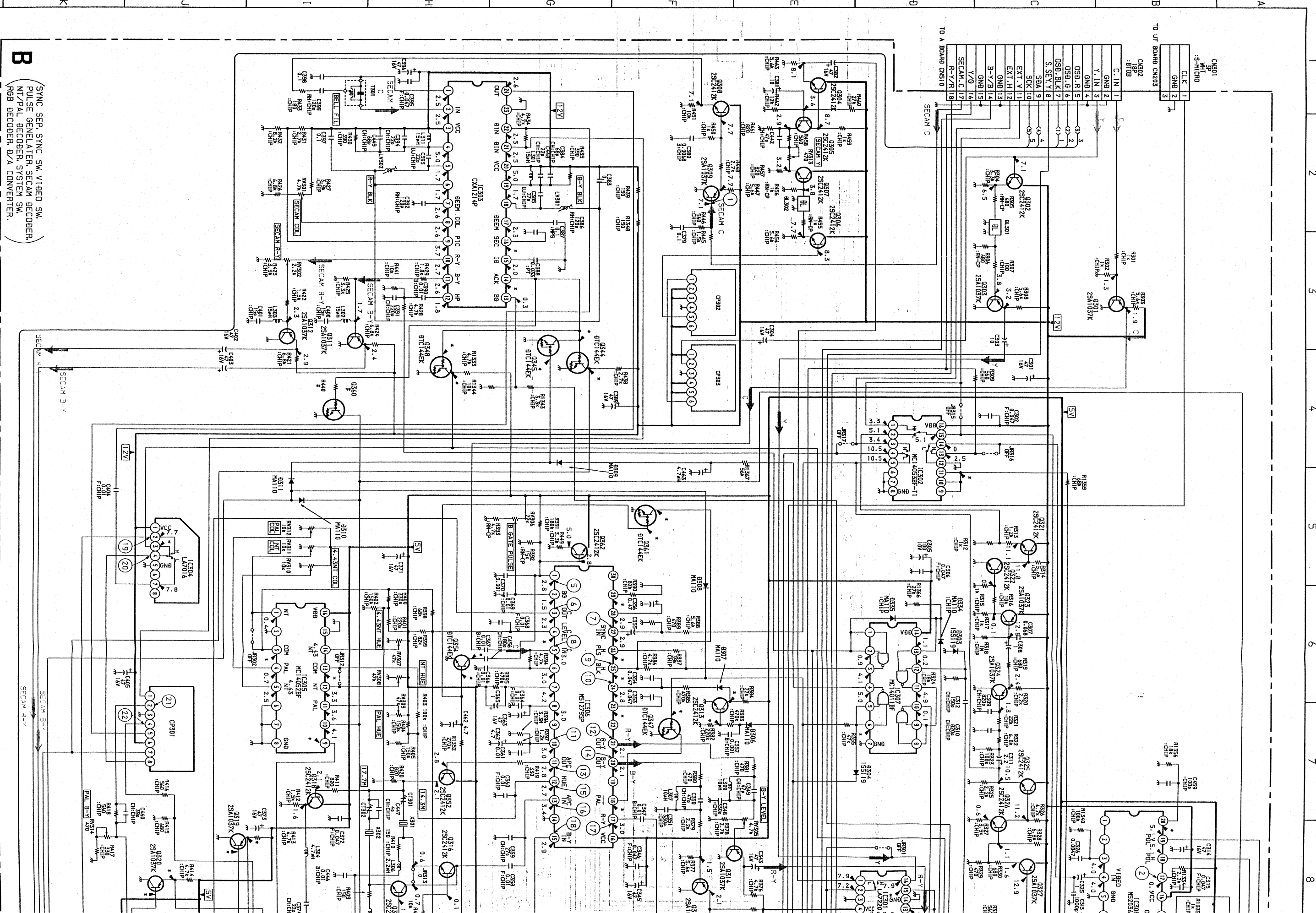
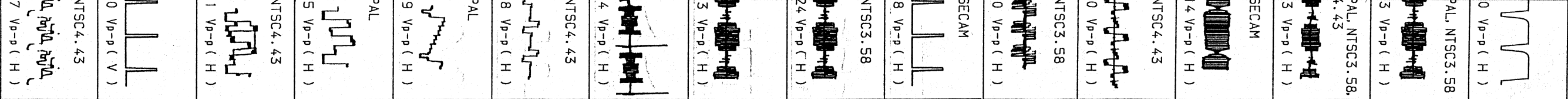
REF. NO	PAL	SECAM	NTSC 3.58	NTSC 4.43
IC301 ⑩	11.0	0.1	11.0	11.0
IC302 ⑩	11.0	0.1	11.0	11.0
IC303 ⑩	11.0	0.1	11.0	11.0
IC304 ⑩	0.3	0.4	0.6	0.2
IC305 ⑩	0.2	0.3	0.6	0.2
IC306 ⑩	0.2	0.4	0.5	0.2
IC307 ⑩	0	0	0	0.1
IC308 ⑩	3.7	3.7	3.7	4.1
IC309 ⑩	1.2	0.9	0.9	0.6
IC310 ⑩	1.1	4.1	1.1	0.2
IC311 ⑩	1.1	4.1	1.1	0.2
IC312 ⑩	1.1	4.1	1.1	0.2
IC313 ⑩	1.1	4.1	1.1	0.2
IC314 ⑩	1.1	4.1	1.1	0.2
IC315 ⑩	1.1	4.1	1.1	0.2
IC316 ⑩	1.1	4.1	1.1	0.2
IC317 ⑩	1.1	4.1	1.1	0.2
IC318 ⑩	1.1	4.1	1.1	0.2
IC319 ⑩	1.1	4.1	1.1	0.2
IC320 ⑩	1.1	4.1	1.1	0.2
IC321 ⑩	1.1	4.1	1.1	0.2
IC322 ⑩	1.1	4.1	1.1	0.2
IC323 ⑩	1.1	4.1	1.1	0.2
IC324 ⑩	1.1	4.1	1.1	0.2
IC325 ⑩	1.1	4.1	1.1	0.2
IC326 ⑩	1.1	4.1	1.1	0.2
IC327 ⑩	1.1	4.1	1.1	0.2
IC328 ⑩	1.1	4.1	1.1	0.2
IC329 ⑩	1.1	4.1	1.1	0.2
IC330 ⑩	1.1	4.1	1.1	0.2
IC331 ⑩	1.1	4.1	1.1	0.2
IC332 ⑩	1.1	4.1	1.1	0.2
IC333 ⑩	1.1	4.1	1.1	0.2
IC334 ⑩	1.1	4.1	1.1	0.2
IC335 ⑩	1.1	4.1	1.1	0.2
IC336 ⑩	1.1	4.1	1.1	0.2
IC337 ⑩	1.1	4.1	1.1	0.2
IC338 ⑩	1.1	4.1	1.1	0.2
IC339 ⑩	1.1	4.1	1.1	0.2
IC340 ⑩	1.1	4.1	1.1	0.2
IC341 ⑩	1.1	4.1	1.1	0.2
IC342 ⑩	1.1	4.1	1.1	0.2
IC343 ⑩	1.1	4.1	1.1	0.2
IC344 ⑩	1.1	4.1	1.1	0.2
IC345 ⑩	1.1	4.1	1.1	0.2
IC346 ⑩	1.1	4.1	1.1	0.2
IC347 ⑩	1.1	4.1	1.1	0.2
IC348 ⑩	1.1	4.1	1.1	0.2
IC349 ⑩	1.1	4.1	1.1	0.2
IC350 ⑩	1.1	4.1	1.1	0.2
IC351 ⑩	1.1	4.1	1.1	0.2
IC352 ⑩	1.1	4.1	1.1	0.2
IC353 ⑩	1.1	4.1	1.1	0.2
IC354 ⑩	1.1	4.1	1.1	0.2
IC355 ⑩	1.1	4.1	1.1	0.2
IC356 ⑩	1.1	4.1	1.1	0.2
IC357 ⑩	1.1	4.1	1.1	0.2
IC358 ⑩	1.1	4.1	1.1	0.2
IC359 ⑩	1.1	4.1	1.1	0.2
IC360 ⑩	1.1	4.1	1.1	0.2
IC361 ⑩	1.1	4.1	1.1	0.2
IC362 ⑩	1.1	4.1	1.1	0.2
IC363 ⑩	1.1	4.1	1.1	0.2

B BOARD IC308 M520365SP



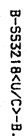
B BOARD WAVEFORMS

① SECAM 0.5 Vp-p (H)	② 4.9 Vp-p (H)	③ 5.0 Vp-p (H)
④ 1.6 Vp-p (V)	⑤ 1.2 Vp-p (H)	⑥ PAL, NTSC3.58 0.3 Vp-p (H)
⑦ NTSC4.43 0.6 Vp-p (H)	⑧ 0.4 Vp-p (H)	⑨ PAL, NTSC3.58, 4.43 0.3 Vp-p (H)
⑩ SECAM 0.2 Vp-p (H)	⑪ 5.3 Vp-p (H)	⑫ SECAM 0.14 Vp-p (H)
⑬ SECAM 0.8 Vp-p (H)	⑭ PAL, NTSC3.58 1.3 Vp-p (H)	⑮ NTSC4.43 2.0 Vp-p (H)
⑯ SECAM 8.0 Vp-p (H)	⑰ PAL 1.3 Vp-p (H)	⑱ NTSC3.58 1.0 Vp-p (H)
⑲ NTSC4.43 1.7 Vp-p (H)	⑳ SECAM 3.3 Vp-p (H)	㉑ SECAM 3.8 Vp-p (H)
㉒ PAL 0.3 Vp-p (H)	㉓ SECAM 0.1 Vp-p (H)	㉔ NTSC3.58 0.24 Vp-p (H)
㉕ NTSC4.43 0.45 Vp-p (H)	㉖ PAL, SECAM 11.4 Vp-p (H)	㉗ 0.3 Vp-p (H)
㉘ PAL 0.3 Vp-p (H)	㉙ 0.2 Vp-p (H)	㉚ 0.4 Vp-p (H)
㉛ 0.5 Vp-p (H)	㉜ PAL, SECAM NTSC3.58 0.5 Vp-p (H)	㉝ NTSC4.43 0.8 Vp-p (H)
㉞ PAL, SECAM NTSC3.58 0.5 Vp-p (H)	㉟ NTSC4.43 0.8 Vp-p (H)	㊱ PAL 0.9 Vp-p (H)
㊲ SECAM 0.8 Vp-p (H)	㊳ NTSC3.58, 4.43 1.0 Vp-p (H)	㊴ PAL 3.5 Vp-p (H)
㊵ SECAM 3.3 Vp-p (H)	㊶ NTSC3.58 3.7 Vp-p (H)	㊷ NTSC4.43 4.1 Vp-p (H)
㊸ PAL, SECAM 3.1 Vp-p (H)	㊹ NTSC3.58, 4.43 3.5 Vp-p (H)	㊺ 5.0 Vp-p (V)
㊻ PAL, SECAM 2.1 Vp-p (H)	㊼ NTSC3.58 2.4 Vp-p (H)	㊽ NTSC4.43 2.7 Vp-p (H)
㊾ 5.0 Vp-p (H)	㊿ 3.5 Vp-p (V)	



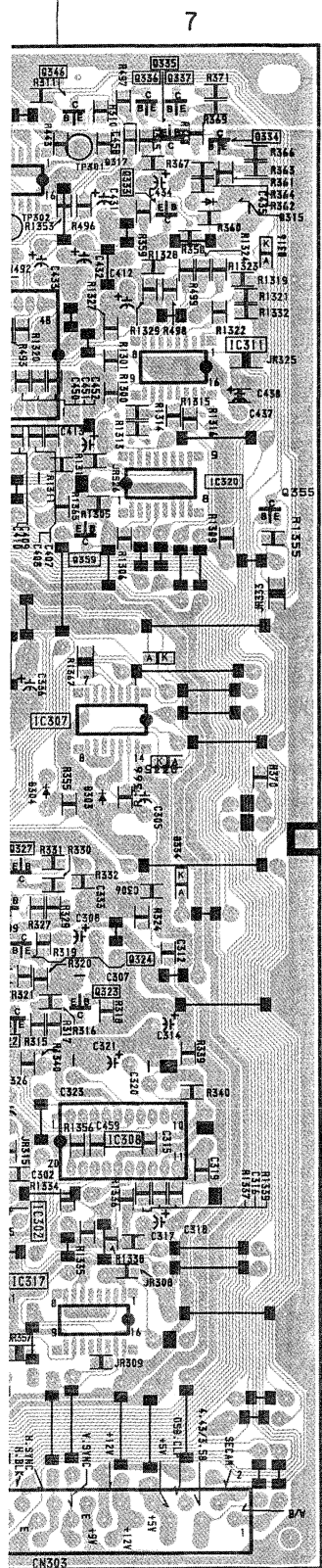
**B** (SYNC SEP, SYNC SW VIDEO SW, PULSE GENERATOR, SECAM DECODER, NT/PAL DECODER, SYSTEM SW, RGB DECODER, D/A CONVERTER.)





**B**

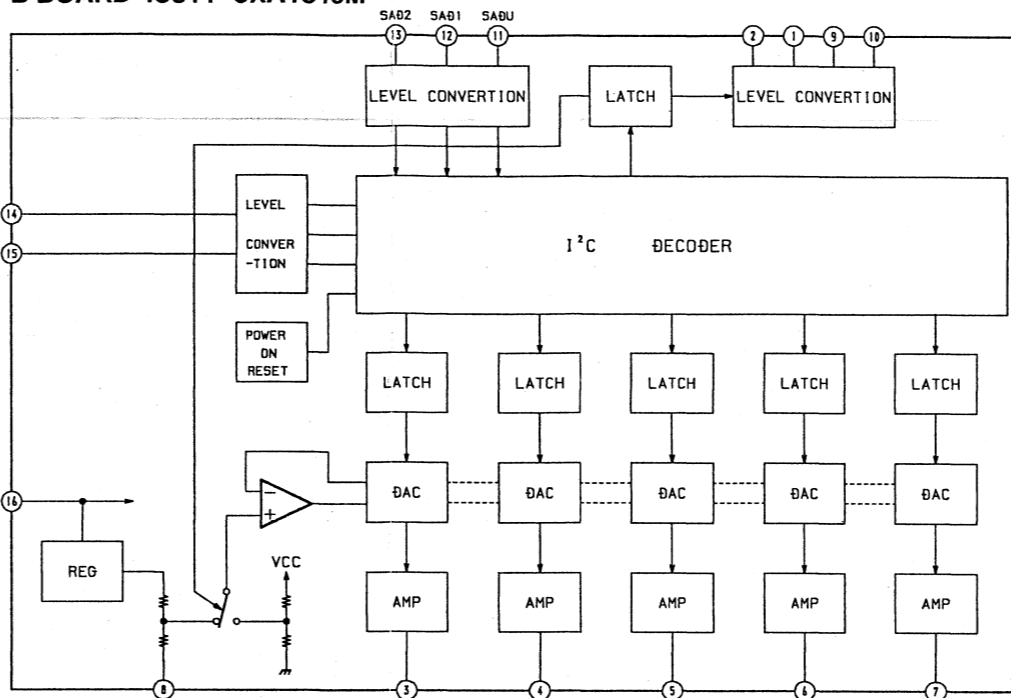
IC		Q332	F - 5	D325	A - 3
IC301	D - 4	Q333	A - 7	D326	B - 3
IC302	G - 6	Q334	A - 7	D327	A - 3
IC303	A - 1	Q335	A - 7	D328	B - 3
IC304	C - 2	Q336	A - 7	D329	C - 4
IC305	G - 3	Q337	A - 7	D331	G - 6
IC306	E - 3	Q338	A - 5	D333	D - 4
IC307	D - 7	Q339	A - 5	D334	E - 7
IC308	G - 7	Q340	A - 5	D335	E - 7
IC309	G - 4	Q341	A - 5	D336	G - 5
IC310	E - 1	Q342	A - 4	<b>VARIABLE RESISTOR</b>  RV301     A - 2 RV302     A - 2 RV305     D - 3 RV306     E - 4 RV307     H - 3 RV308     H - 3 RV309     H - 3 RV310     G - 3 RV311     G - 4 RV312     G - 3 RV313     G - 2 RV314     C - 1	
IC311	B - 7	Q343	A - 4		
IC312	B - 5	Q344	B - 2		
IC313	D - 5	Q345	B - 3		
IC316	B - 4	Q346	A - 6		
IC318	H - 6	Q347	E - 3		
IC319	A - 6	Q348	B - 3		
IC320	C - 7	Q349	E - 2		
		Q352	E - 3		
		Q354	E - 4		
<b>TRANSISTOR</b>		Q355	C - 7		
		Q356	D - 1		
Q301	H - 2	Q357	D - 1		
Q302	H - 2	Q358	C - 1		
Q303	G - 2	Q359	C - 7		
Q304	F - 2	Q360	C - 1		
Q305	F - 1	Q361	D - 3		
Q306	H - 2	Q362	E - 4		
Q307	G - 1	<b>DIODE</b>			
Q308	G - 1				
Q309	H - 1	D303	E - 7		
Q311	A - 3	D304	E - 6		
Q312	A - 3	D306	D - 3		
Q313	D - 3	D307	D - 3		
Q314	D - 3	D308	E - 4		
Q315	D - 2	D309	C - 3		
Q316	E - 2	D310	E - 4		
Q317	E - 2	D311	C - 3		
Q318	F - 3	D312	H - 6		
Q319	D - 2	D313	G - 5		
Q320	E - 1	D314	G - 5		
Q321	F - 6	D315	A - 7		
Q322	F - 6	D316	B - 7		
Q323	F - 7	D317	A - 7		
Q324	F - 6	D318	A - 4		
Q325	F - 6	D319	A - 4		
Q326	E - 6	D320	A - 4		
Q327	E - 6	D321	A - 4		
Q328	F - 5	D322	A - 4		
Q329	E - 5	D323	A - 3		
Q330	G - 5	D324	A - 3		
Q331	F - 5				



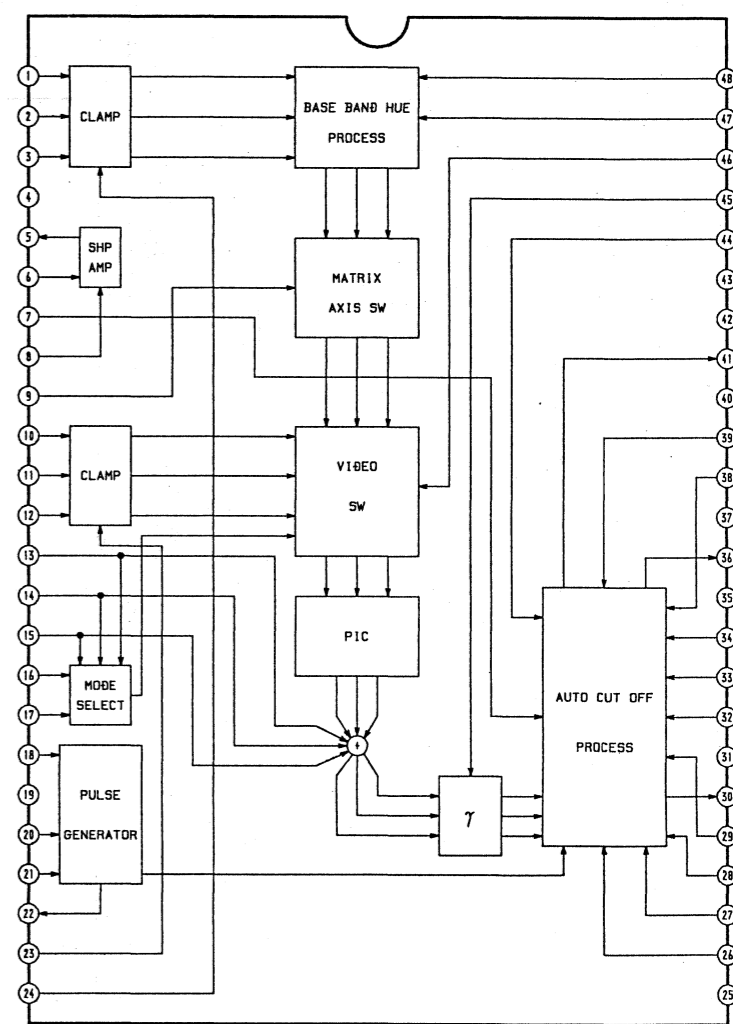
B BOARD

IC		Q332	F - 5	D325	A - 3		
IC301	D - 4	Q333	A - 7	D326	B - 3		
IC302	G - 6	Q334	A - 7	D327	A - 3		
IC303	A - 1	Q335	A - 7	D328	B - 3		
IC304	C - 2	Q336	A - 7	D329	C - 4		
IC305	G - 3	Q337	A - 7	D331	G - 6		
IC306	E - 3	Q338	A - 5	D333	D - 4		
IC307	D - 7	Q339	A - 5	D334	E - 7		
IC308	G - 7	Q340	A - 5	D335	E - 7		
IC309	G - 4	Q341	A - 5	D336	G - 5		
IC310	E - 1	Q342	A - 4	VARIABLE RESISTOR			
IC311	B - 7	Q343	A - 4				
IC312	B - 5	Q344	B - 2				
IC313	D - 5	Q345	B - 3				
IC316	B - 4	Q346	A - 6				
IC318	H - 6	Q347	E - 3				
IC319	A - 6	Q348	B - 3				
IC320	C - 7	Q349	E - 2				
TRANSISTOR		Q352	E - 3				
		Q354	E - 4				
		Q355	C - 7				
		Q356	D - 1				
		Q357	D - 1				
		Q358	C - 1				
		Q359	C - 7				
		Q360	C - 1				
		Q361	D - 3				
		Q362	E - 4				
				DIODE			
				D303	E - 7		
				D304	E - 6		
				D306	D - 3		
		D307	D - 3				
		D308	E - 4				
		D309	C - 3				
		D310	E - 4				
		D311	C - 3				
		D312	H - 6				
		D313	G - 5				
		D314	G - 5				
		D315	A - 7				
		D316	B - 7				
		D317	A - 7				
		D318	A - 4				
		D319	A - 4				
		D320	A - 4				
		D321	A - 4				
		D322	A - 4				
		D323	A - 3				
		D324	A - 3				

B BOARD IC311 CXA1315M

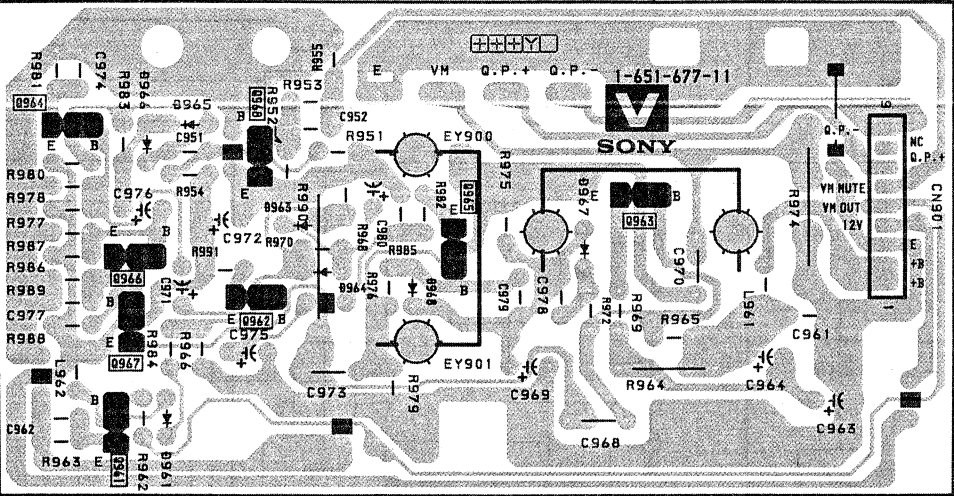


B BOARD IC312 CXA1739S



**V** [VM AMP] **DX** [SYSTEM CONT] **M** [CPU, MEM]

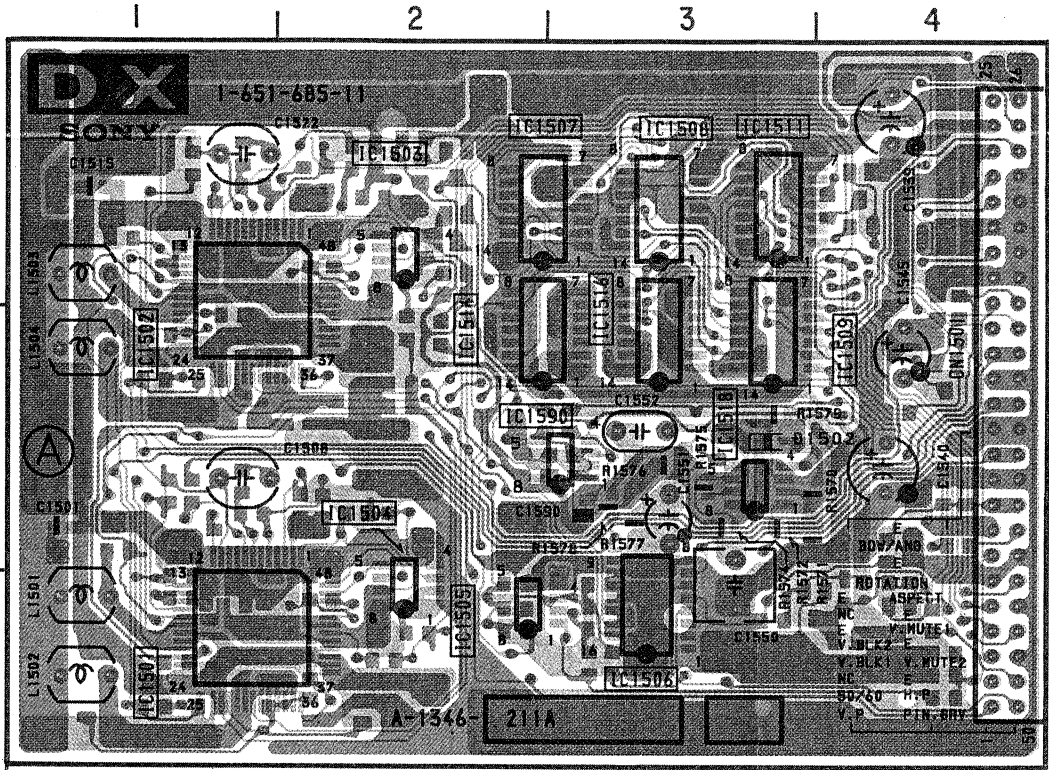
- V BOARD -



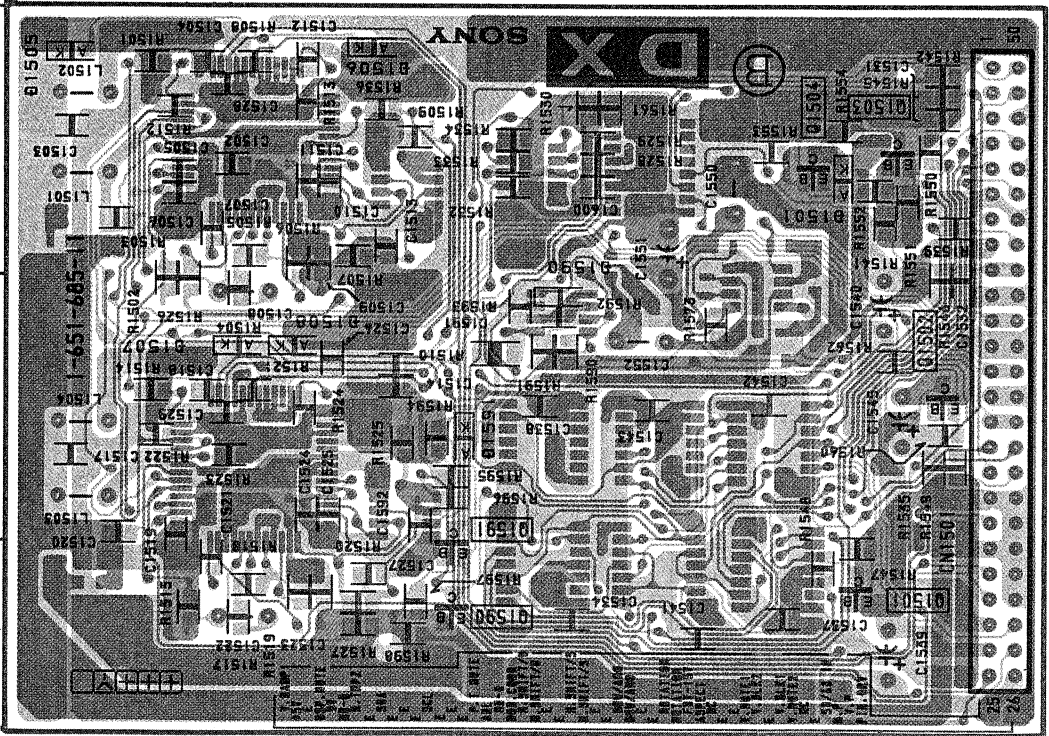
DX BOARD

IC	
IC1501	C - 1
IC1502	B - 1
IC1503	A - 2
IC1504	B - 2
IC1505	C - 2
IC1506	C - 3
IC1507	A - 3
IC1508	A - 3
IC1509	B - 3
IC1511	A - 3
IC1514	B - 3
IC1516	B - 3
IC1518	B - 3
IC1590	B - 3
DIODE	
Q1501	F - 4
Q1502	E - 4
Q1503	D - 4
Q1504	D - 3
Q1590	F - 2
Q1591	E - 2
TRANSISTOR	
D1501	D - 4
D1502	B - 3
D1505	D - 1
D1506	D - 2
D1507	E - 1
D1508	E - 2
D1590	E - 3
D1591	E - 2

- DX BOARD - (Component Side)



(Conductor Side)



Note :

- Pattern from the side which enables seeing.
- Pattern of the rear side.

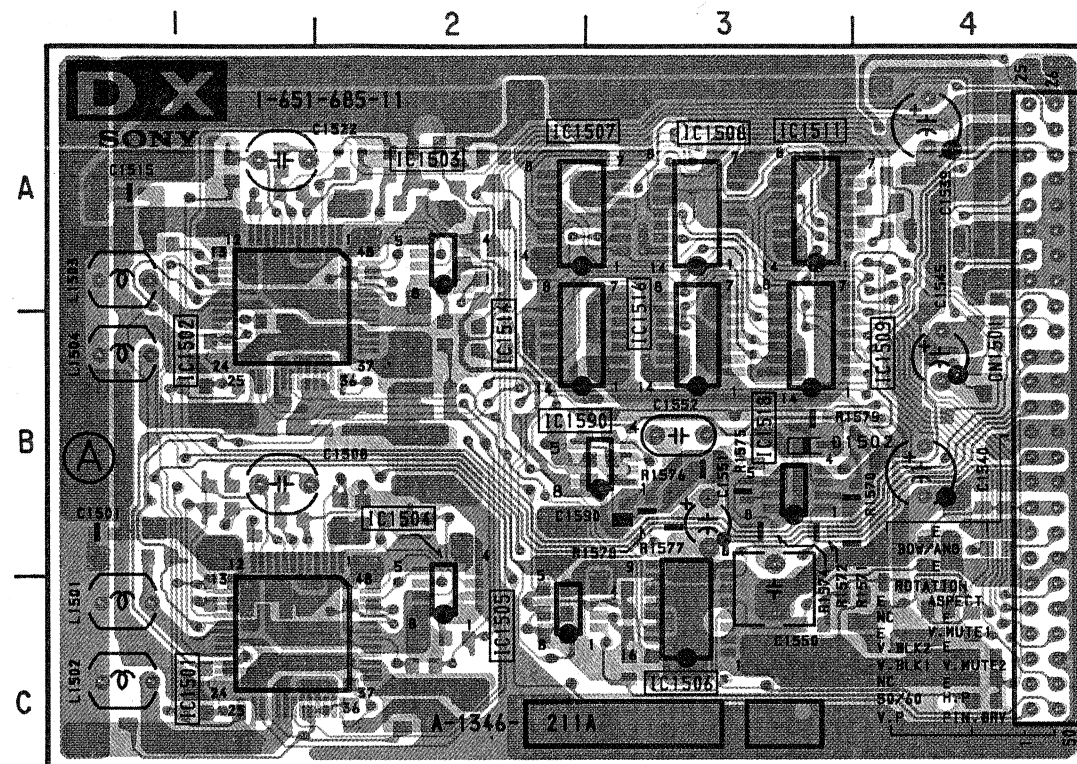
M BOARD

IC	
IIC801	A - 2, E - 2
C802	B - 4
IC803	B - 4
IC804	B - 1
IC805	B - 3
IC806	C - 2
DIODE	
D801	A - 4
D802	E - 3
D803	A - 4
D804	E - 3
D805	D - 1
D806	D - 1
D807	D - 1
D808	C - 1
D809	C - 3
D810	D - 1
D811	D - 3
D812	E - 3
D813	D - 3
D814	E - 3

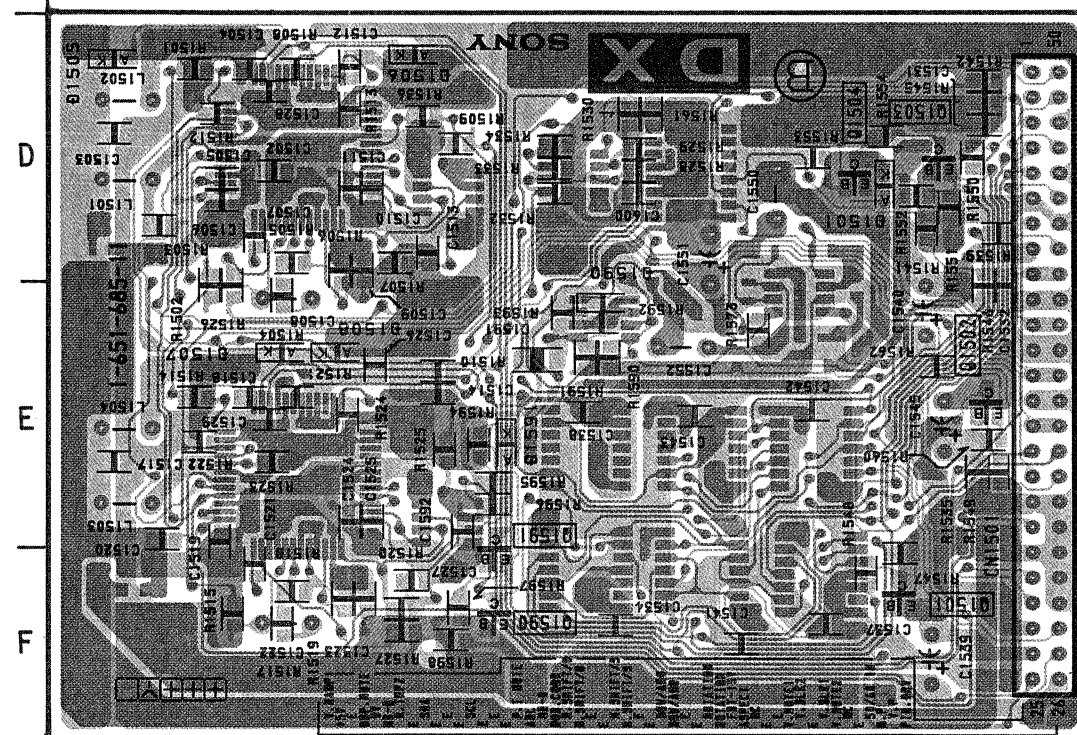
- DX BOARD - (Component Side)

DX BOARD

IC	
IC1501	C-1
IC1502	B-1
IC1503	A-2
IC1504	B-2
IC1505	C-2
IC1506	C-3
IC1507	A-3
IC1508	A-3
IC1509	B-3
IC1511	A-3
IC1514	B-3
IC1516	B-3
IC1518	B-3
IC1590	B-3
DIODE	
Q1501	F-4
Q1502	E-4
Q1503	D-4
Q1504	D-3
Q1590	F-2
Q1591	E-2
TRANSISTOR	
D1501	D-4
D1502	B-3
D1505	D-1
D1506	D-2
D1507	E-1
D1508	E-2
D1590	E-3
D1591	E-2



(Conductor Side)



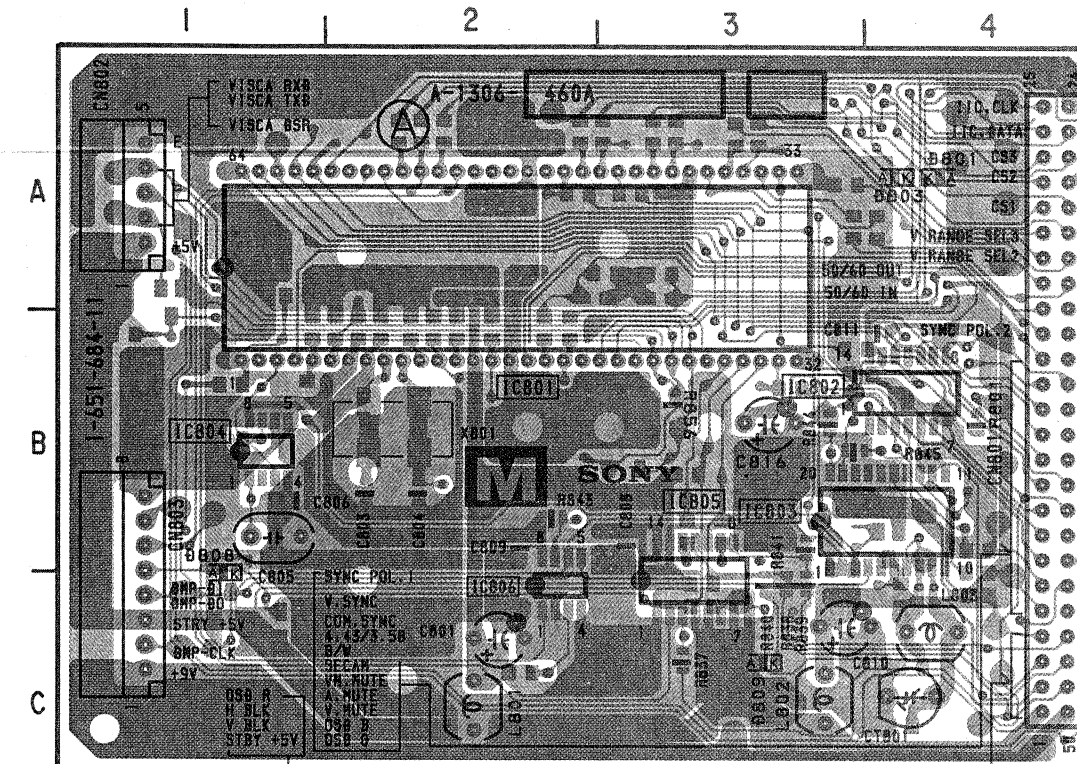
Note :

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

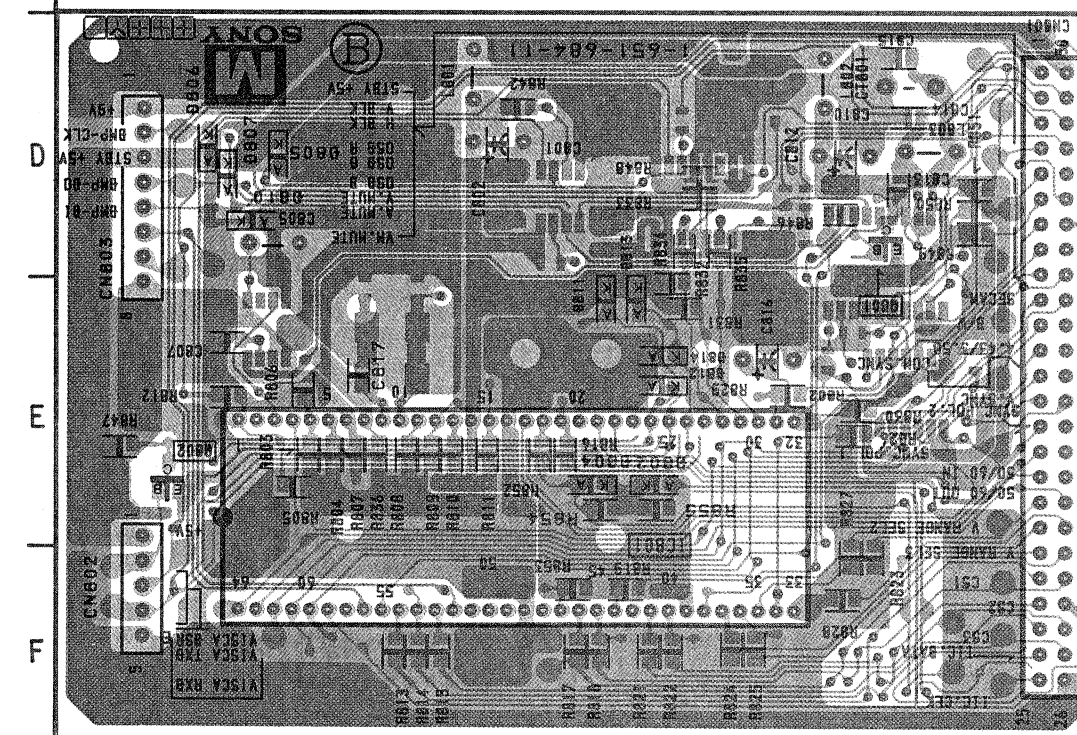
- M BOARD - (Component Side)

M BOARD

IC	
IC801	A-2, E-2
IC802	B-4
IC803	B-4
IC804	B-1
IC805	B-3
IC806	C-2
DIODE	
D801	A-4
D802	E-3
D803	A-4
D804	E-3
D805	D-1
D806	D-1
D807	D-1
D808	C-1
D809	C-3
D810	D-1
D811	D-3
D812	E-3
D813	D-3
D814	E-3



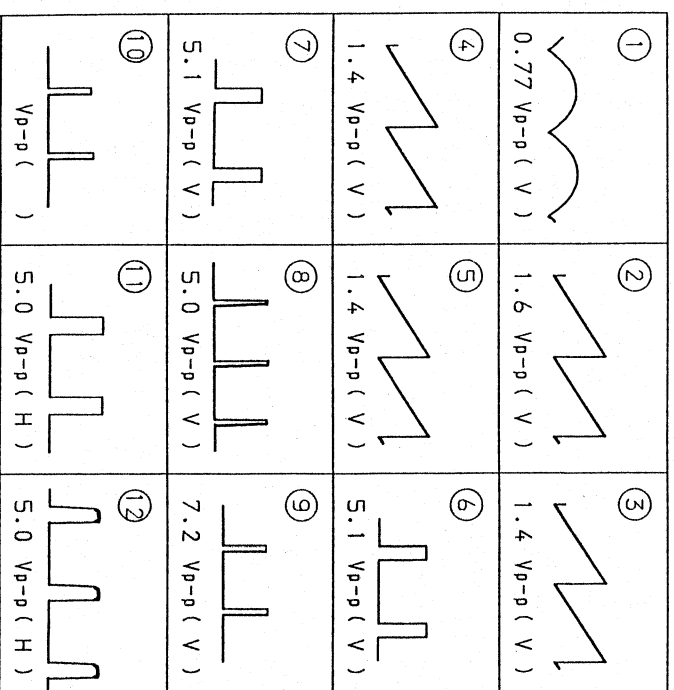
(Conductor Side)



Note :

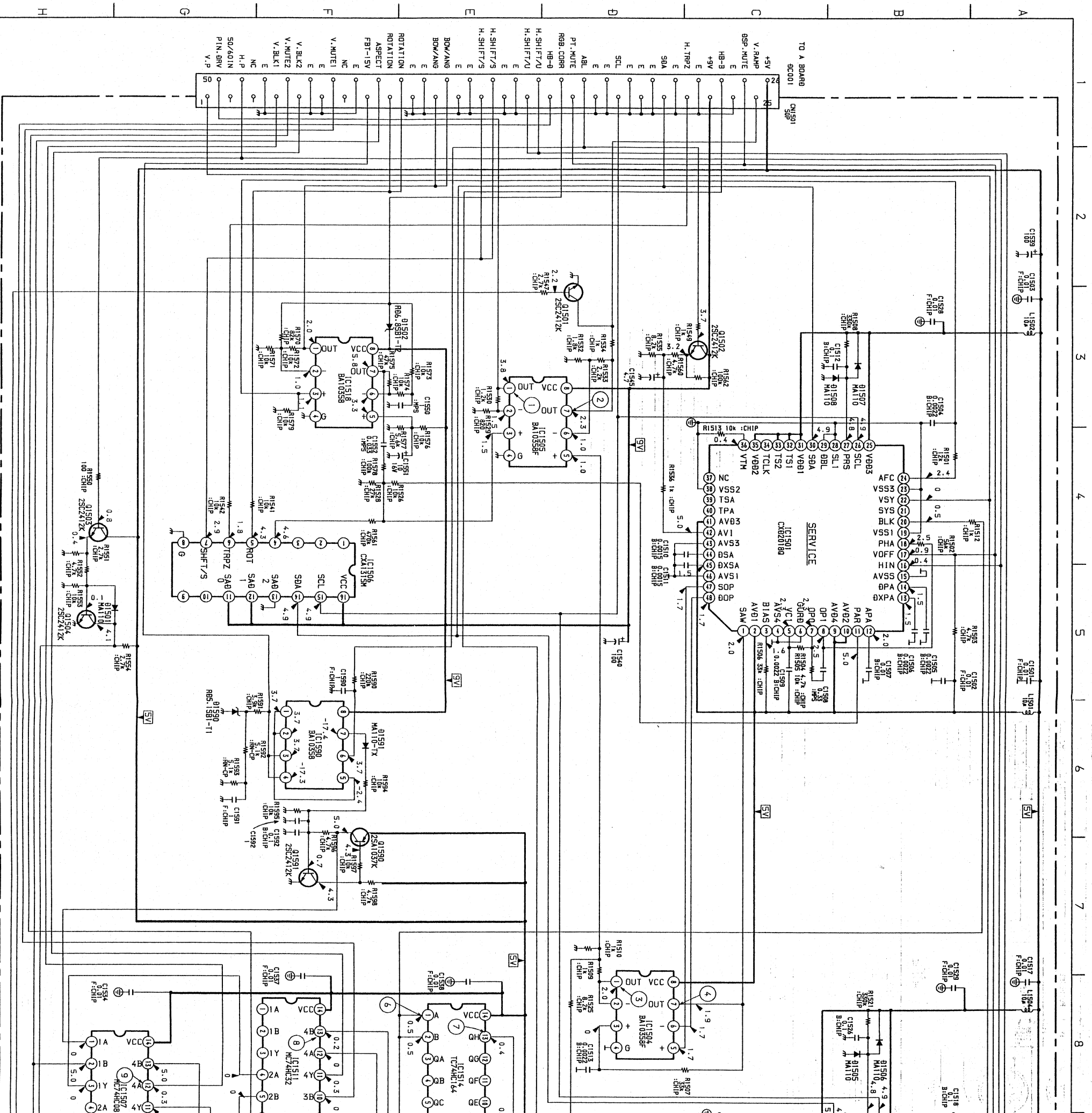
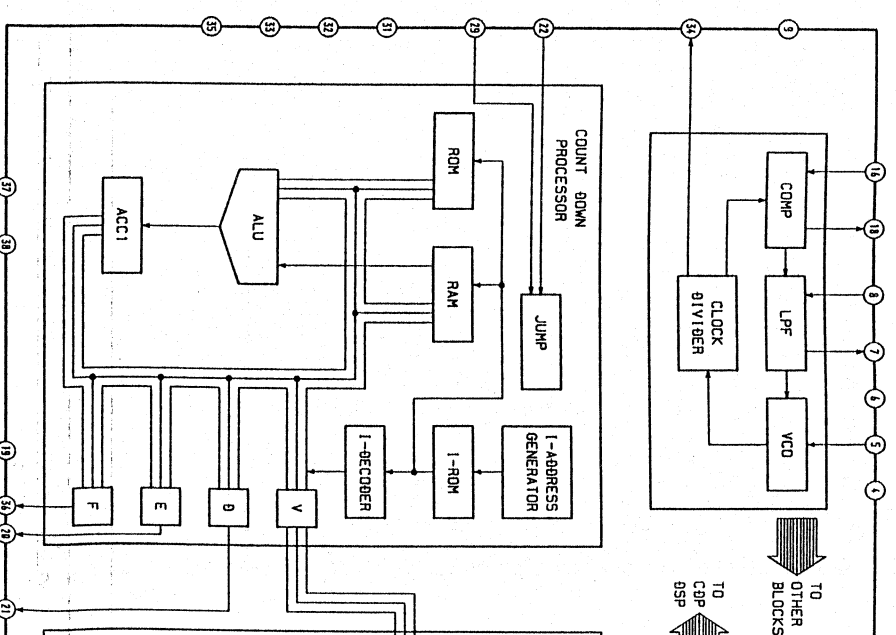
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

• DX BOARD WAVEFORMS

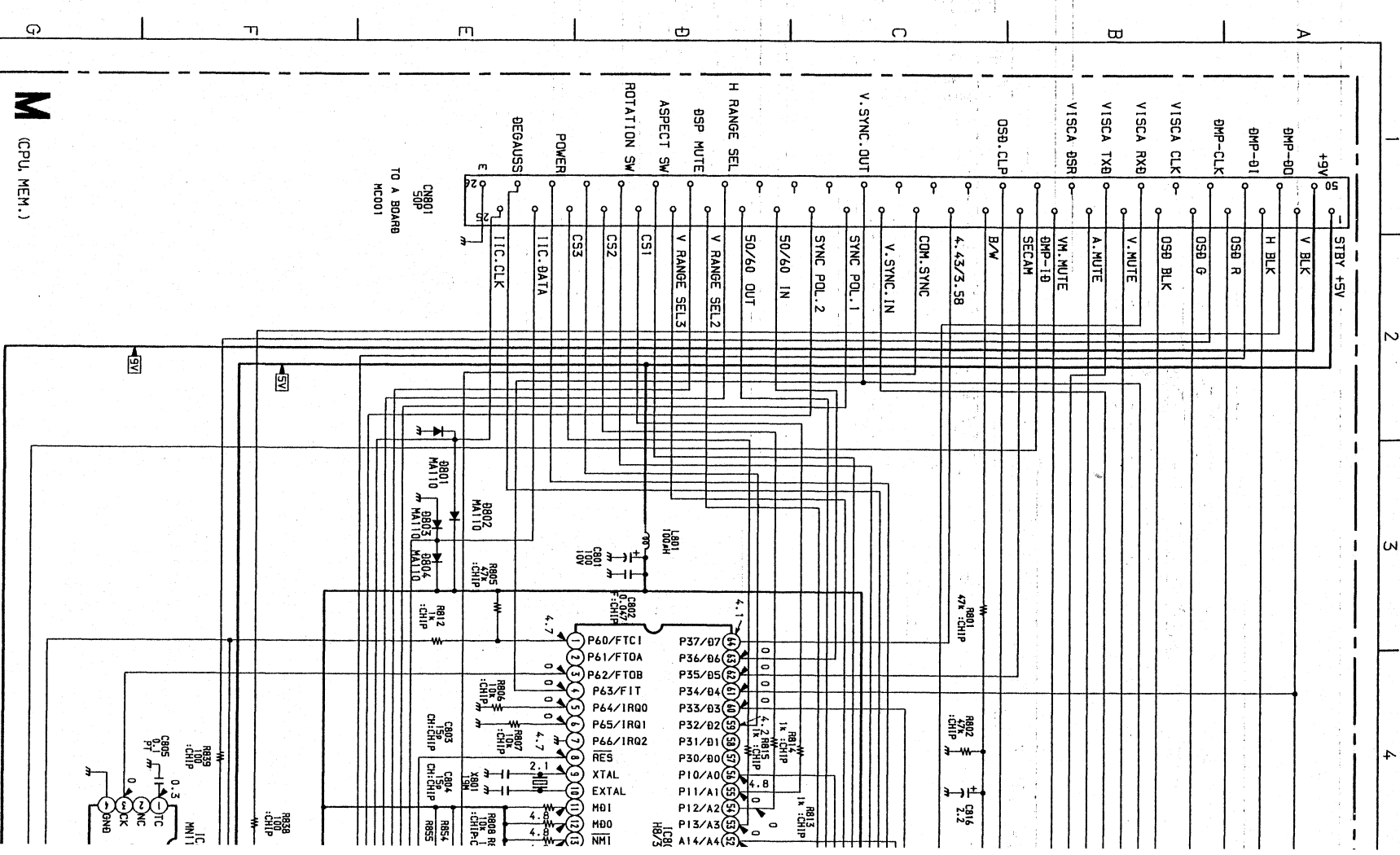
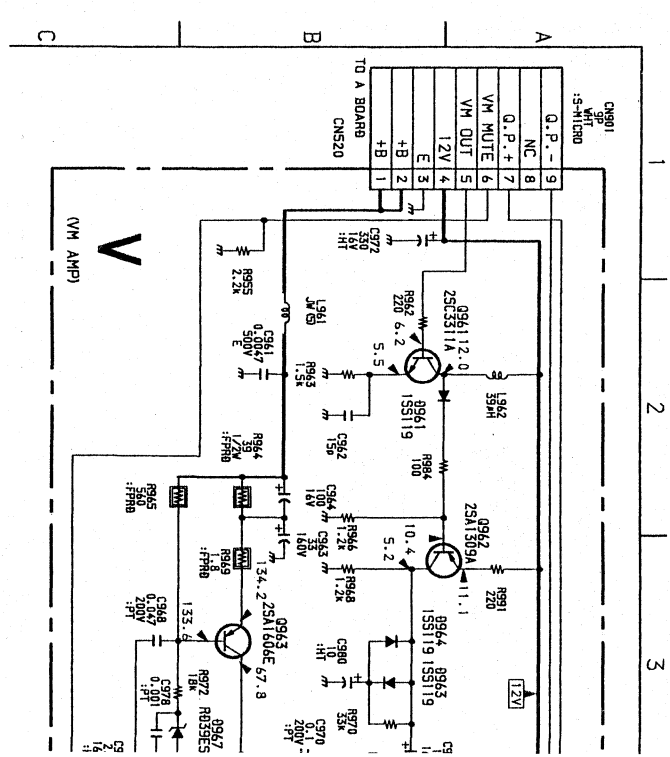
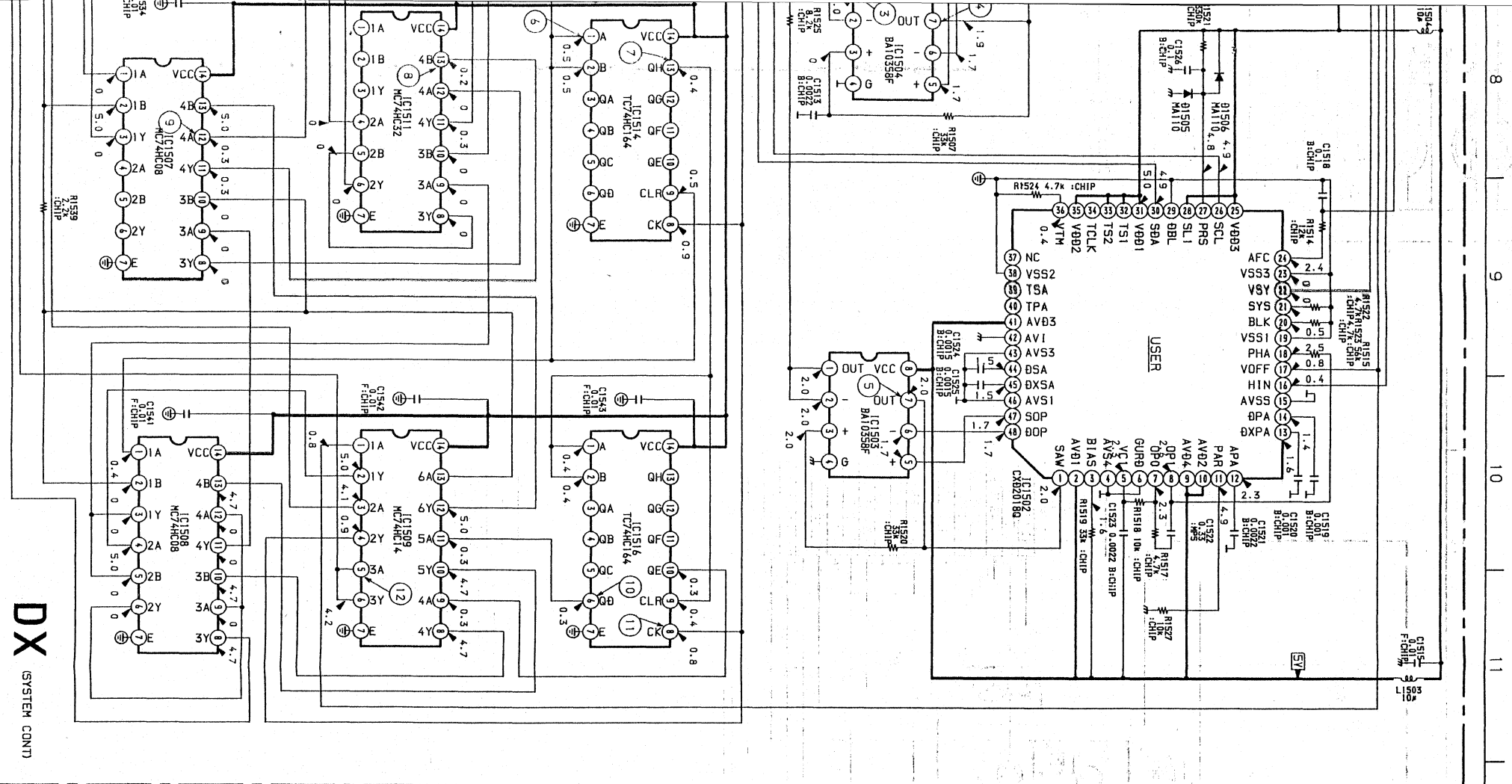
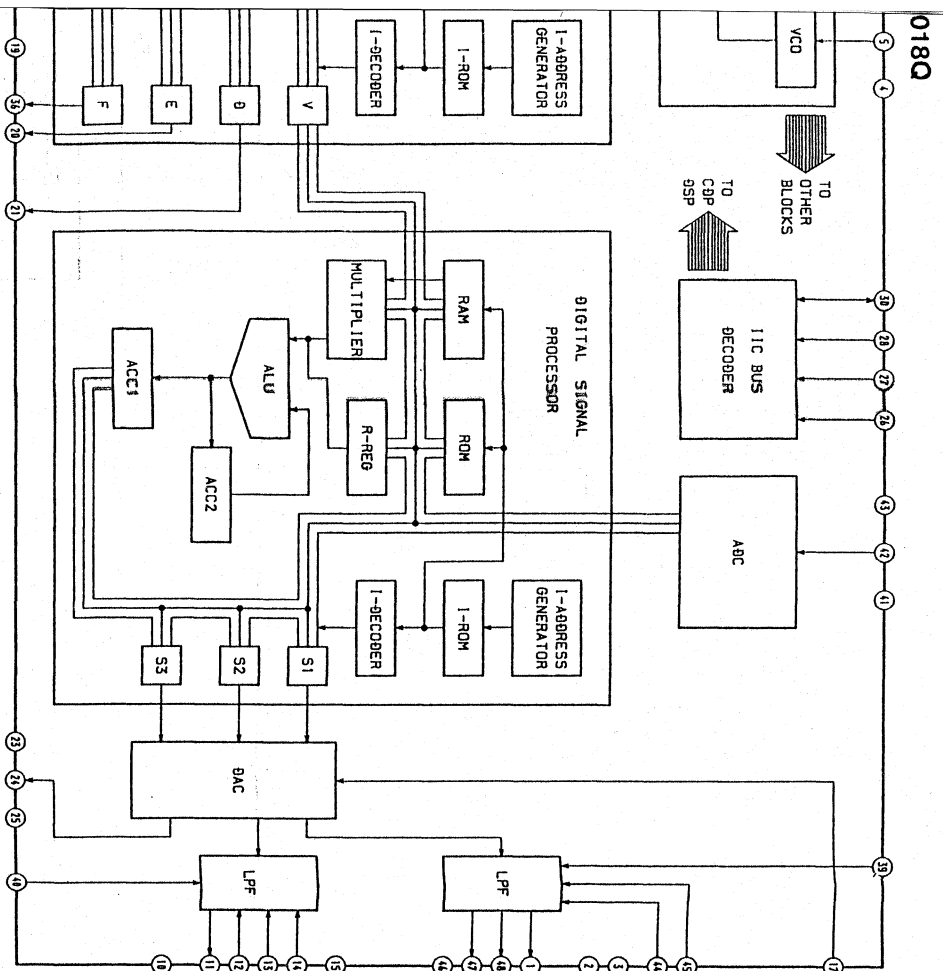


DX BOARD

D1501	H BLK SW 3
D1502	6.8V CLAMP
D1505	PROTECT
D1506	PROTECT
D1507	PROTECT
D1508	PROTECT
D1509	REF VOLT
D1591	VOLT RECT
IC1501	SERVICE GEO CTRL
IC1502	USER GEO CTRL
IC1503	V SAW BUF
IC1504	V SAW BUF
IC1505	SAW PARA OUT
IC1506	D/A CONV
IC1507	REF SHIFT 5
IC1508	REF SHIFT 6
IC1509	REF SHIFT 4
IC1511	REF SHIFT 3
IC1514	REF SHIFT 1
IC1516	REF SHIFT 2
IC1518	AFC CORR
IC1590	ABL BLK
Q1501	SHIFT SW
Q1502	ABL BUF
Q1503	H BLK SW 1
Q1504	H BLK SW 2
Q1590	ABL BLK OUT 1
Q1591	ABL BLK OUT 2

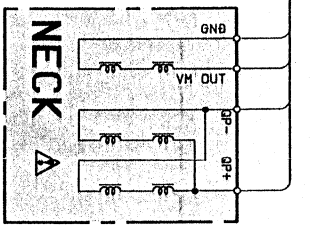
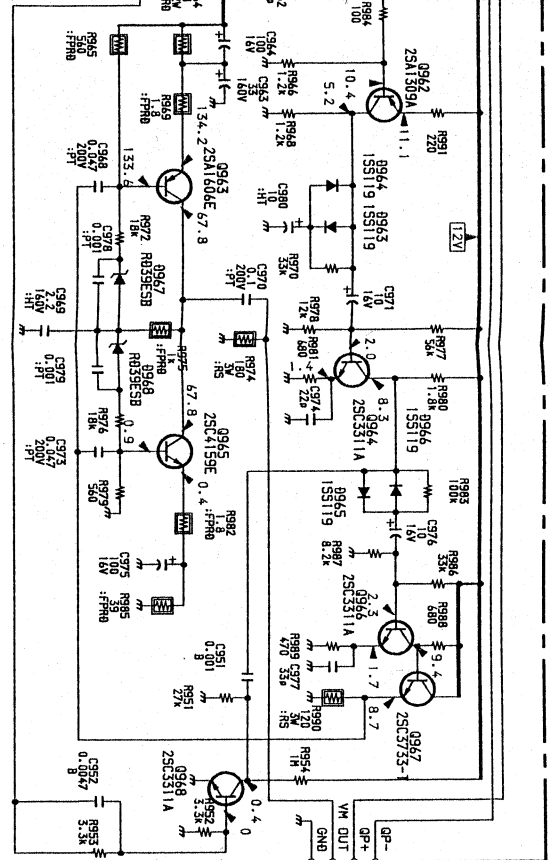




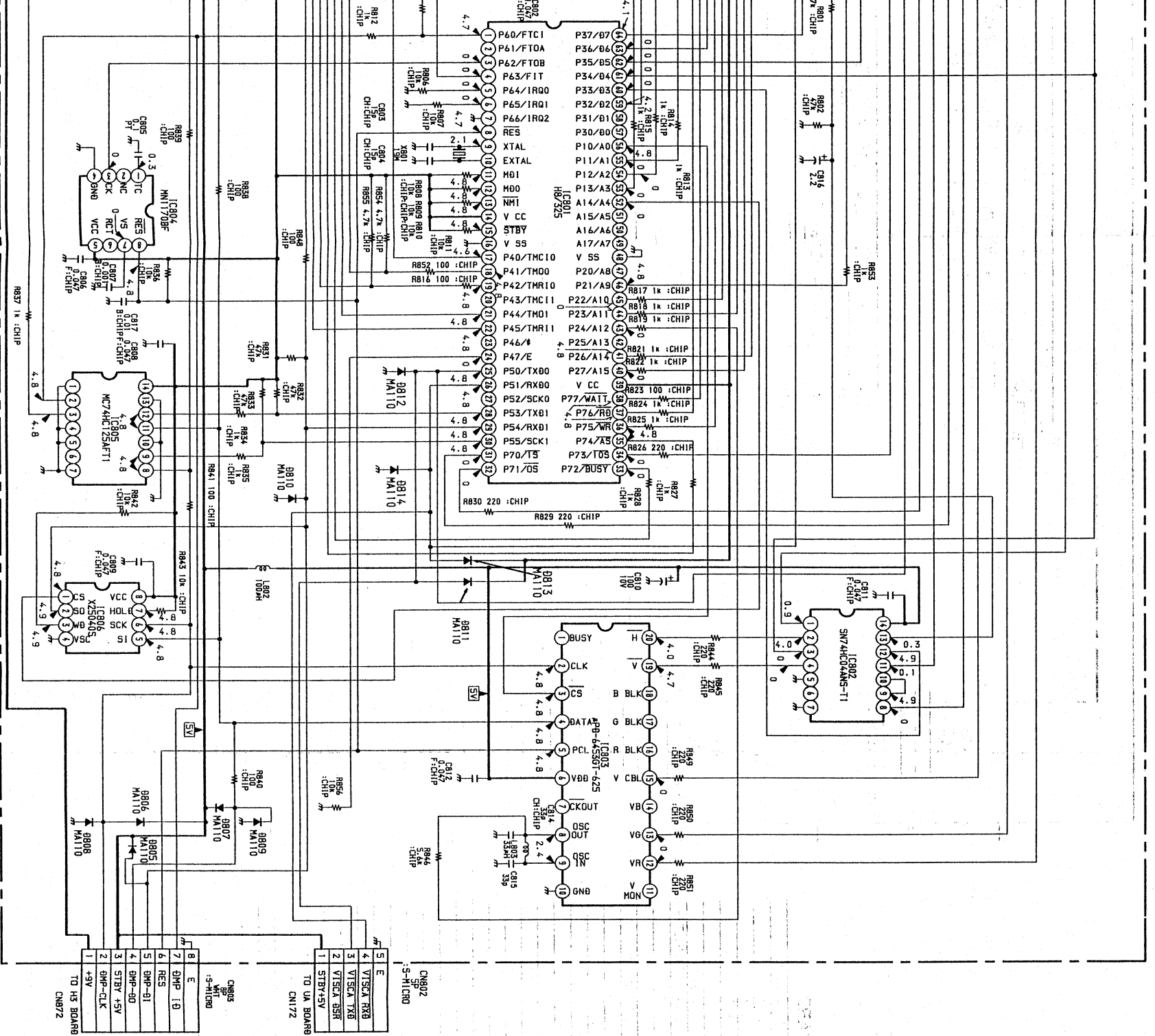


**DX** (SYSTEM CONT)

B-5532184U/C-DX.







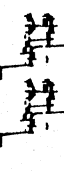





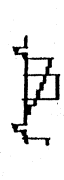




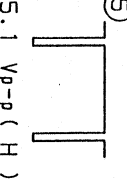
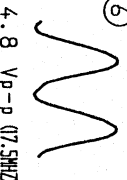
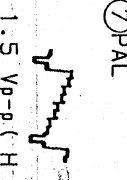
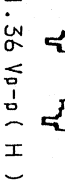
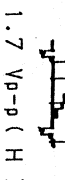
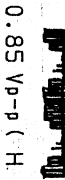
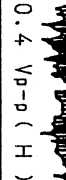


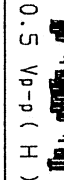
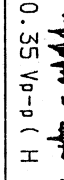
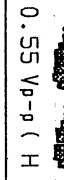
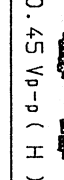
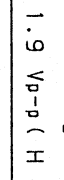
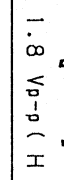
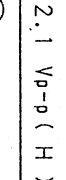
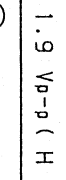
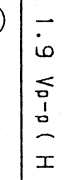
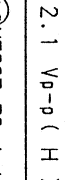
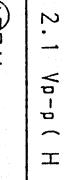
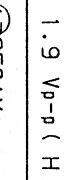
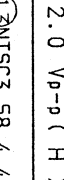
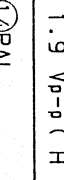
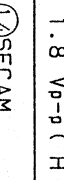
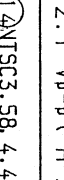
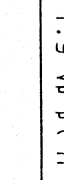
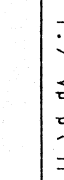
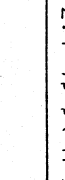
V BOARD	
D961	DC BIAS
D963	SLI CE
D964	SLI CE
D965	CLIP
D966	CLIP
D967	PROT
D968	PROT
D961	VM AMP 1
D962	VM AMP 2
D963	VM OUT
D964	VM BUF
D965	VM OUT
D966	VM OUT 1
D967	VM OUT 2
D968	MUTE SW



M BOARD	
D801	PROTECT
D802	PROTECT
D803	PROTECT
D804	PROTECT
D805	PROTECT
D806	PROTECT
D807	PROTECT
D808	PROTECT
D809	PROTECT
D810	PROTECT
D811	PROTECT
D812	PROTECT
D813	PROTECT
D814	PROTECT
IC801	MICOM
IC802	INVERTER
IC803	CHARACTER GEN
IC804	RESET
IC805	BUF
IC806	MEMORY

B-SS3218<U/C>-H...

• UT BOARD WAVEFORMS

①PAL  1.1 Vp-p (H)	①SECAM  0.95 Vp-p (H)	①NTSC3.58, 4.43  1.0 Vp-p (H)
②PAL  0.66 Vp-p (H)	②SECAM  0.35 Vp-p (H)	②NTSC3.58  0.64 Vp-p (H)
②NTSC4.43  0.6 Vp-p (H)	③PAL  1.9 Vp-p (H)	③SECAM  1.7 Vp-p (H)
③NTSC3.58  2.1 Vp-p (H)	③NTSC4.43  2.26 Vp-p (H)	④PAL  1.65 Vp-p (H)
④SECAM  1.4 Vp-p (H)	④NTSC3.58  1.6 Vp-p (H)	④NTSC4.43  1.72 Vp-p (H)
⑤  5.1 Vp-p (H)	⑥  4.8 Vp-p (7.5MHz)	⑦PAL  1.5 Vp-p (H)
⑦SECAM  1.36 Vp-p (H)	⑦NTSC3.58, 4.43  1.7 Vp-p (H)	⑧PAL  0.85 Vp-p (H)
⑧SECAM  0.4 Vp-p (H)	⑧NTSC3.58  0.9 Vp-p (H)	⑧NTSC4.43  0.82 Vp-p (H)
⑨PAL  0.5 Vp-p (H)	⑨SECAM  0.35 Vp-p (H)	⑨NTSC3.58  0.55 Vp-p (H)
⑨NTSC4.43  0.45 Vp-p (H)	⑩PAL  1.9 Vp-p (H)	⑩SECAM  1.8 Vp-p (H)
⑩NTSC3.58, 4.43  2.1 Vp-p (H)	⑪PAL  1.9 Vp-p (H)	⑪SECAM  1.9 Vp-p (H)
⑪NTSC3.58, 4.43  2.1 Vp-p (H)	⑫PAL  2.1 Vp-p (H)	⑫SECAM  1.9 Vp-p (H)
⑫NTSC3.58, 4.43  2.0 Vp-p (H)	⑬PAL  1.9 Vp-p (H)	⑬SECAM  1.8 Vp-p (H)
⑬NTSC3.58, 4.43  2.1 Vp-p (H)	⑭PAL  1.9 Vp-p (H)	⑭SECAM  1.7 Vp-p (H)
⑭NTSC3.58, 4.43  2.1 Vp-p (H)		

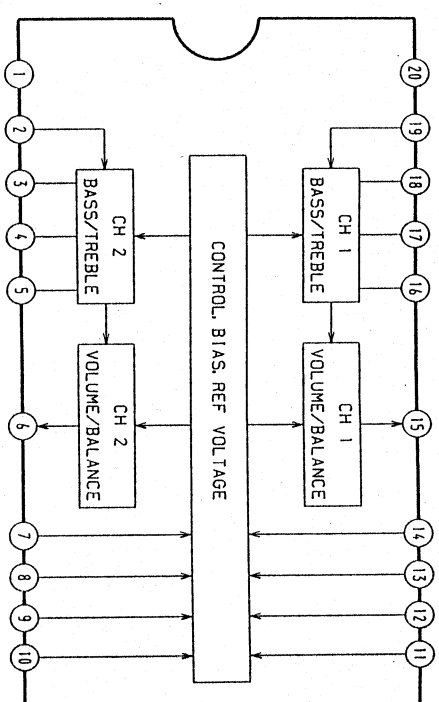
UT BOARD \* MARK

REF. NO	PAL	SECAM	NTSC 3.58	NTSC 4.43
IC202 ②	4.0	4.1	0.1	4.1
IC203 ③	1.5	3.5	1.5	1.5
IC206 ④	5.0	5.0	5.0	2.3
IC208 ⑤	11.9	11.9	0	11.9
Q212 B	0	5.0	0	0
E	0	4.4	0	0
Q216 B	4.6	0	4.6	4.6
C	0	5.0	0	0
Q222 C	1.5	3.5	1.5	1.5
Q227 C	12.0	11.9	0	11.9

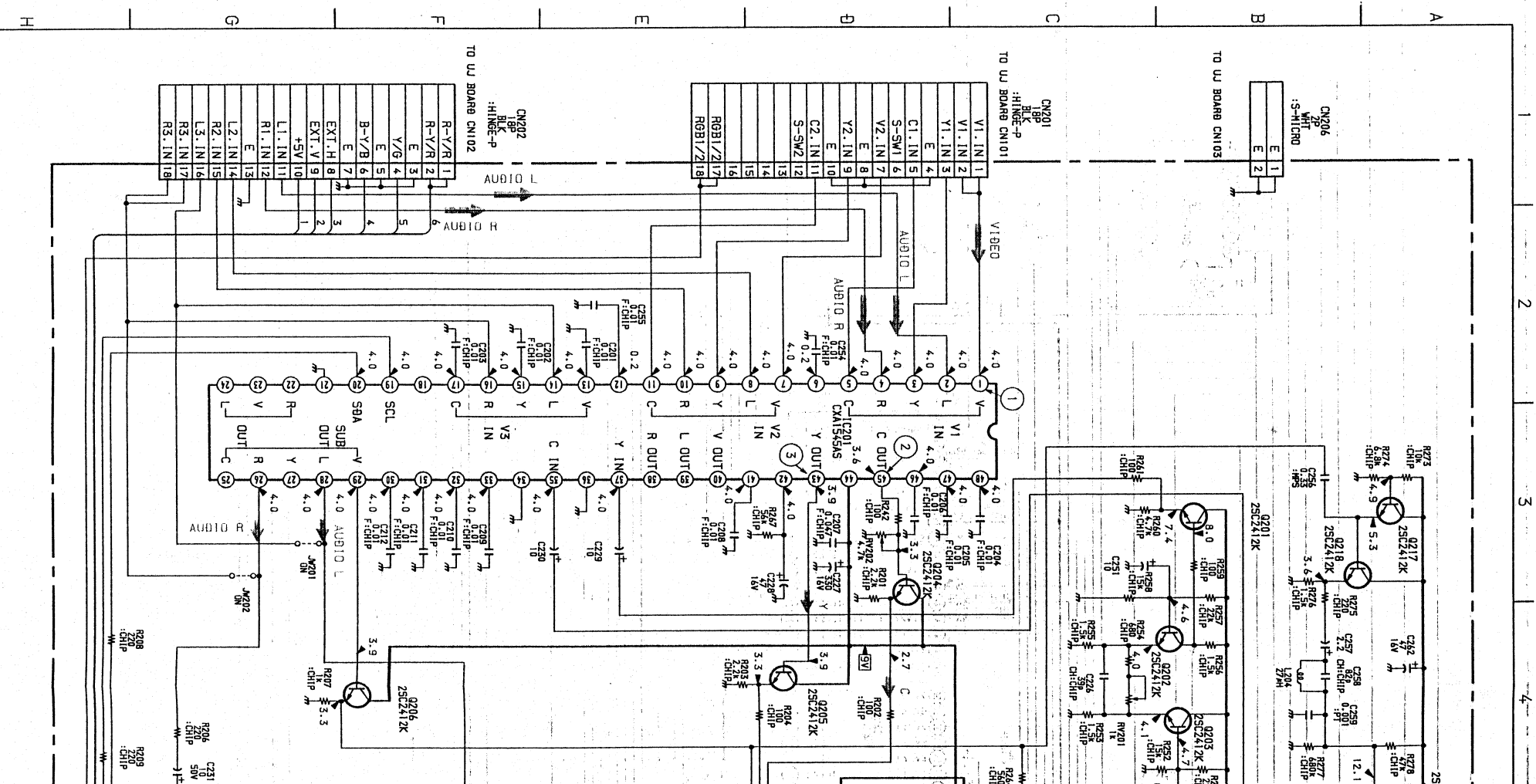
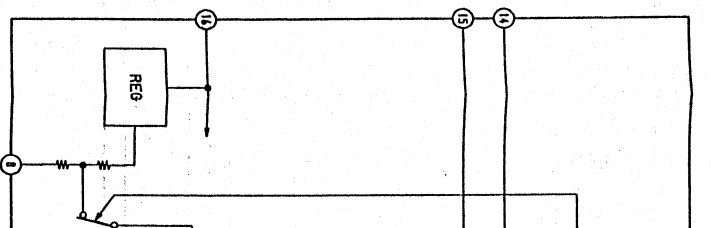
UT BOARD

D202	SECAM SW
D203	CLAMP
D205	CLAMP
D206	PROTECT
IC201	A/V SW
IC202	DIGITAL COMFLTR
IC203	Y SW
IC204	AUDIO CONT
IC205	SYSTEM CONT
IC206	V SW
IC207	C SW
IC208	Y SW
Q201	Y AMP
Q202	Y AMP
Q203	Y AMP
Q204	C OUT
Q205	Y OUT
Q206	V OUT
Q207	Y BUFF
Q208	Y BUFF
Q211	C BUFF
Q212	SECAM SW 2
Q213	CLK AMP
Q214	CLK AMP
Q215	C AMP
Q216	SECAM SW 1
Q217	V BUFF 1
Q218	V BUFF 2
Q219	V BUFF 3
Q220	V BUFF 4
Q221	V BUFF 5
Q222	SECAM SW
Q223	Y AMP
Q224	Y AMP
Q225	Y AMP
Q226	Y AMP
Q227	Y BUFF
Q228	Y SW
Q229	Y SW
Q230	Y BUFF
Q231	Y AMP
Q232	Y BUFF

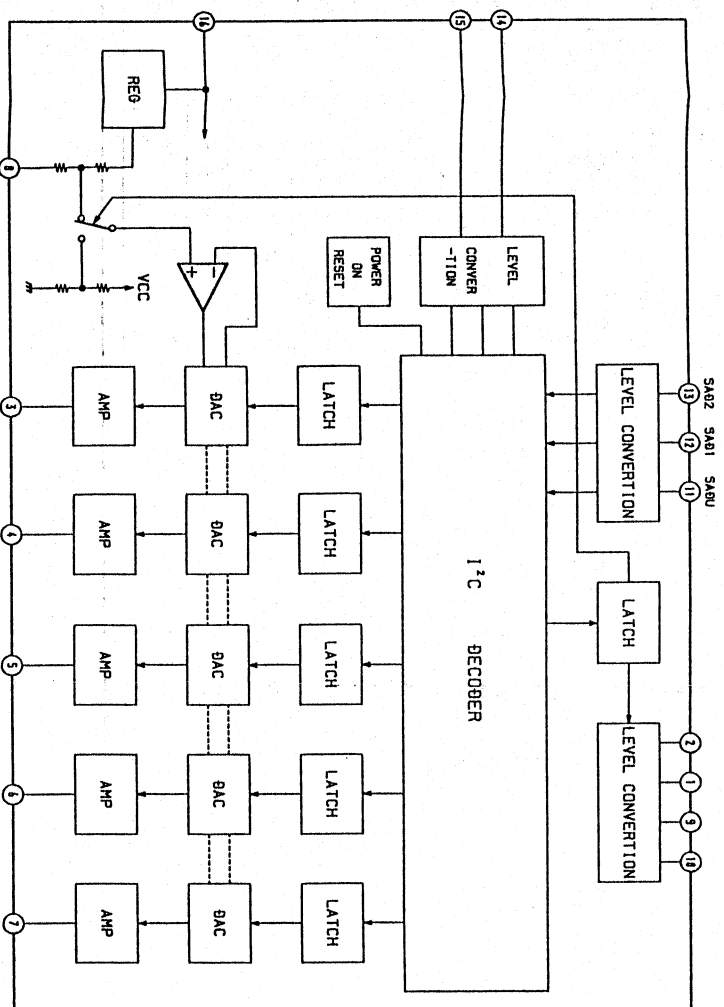
UT BOARD IC204 TA8184P



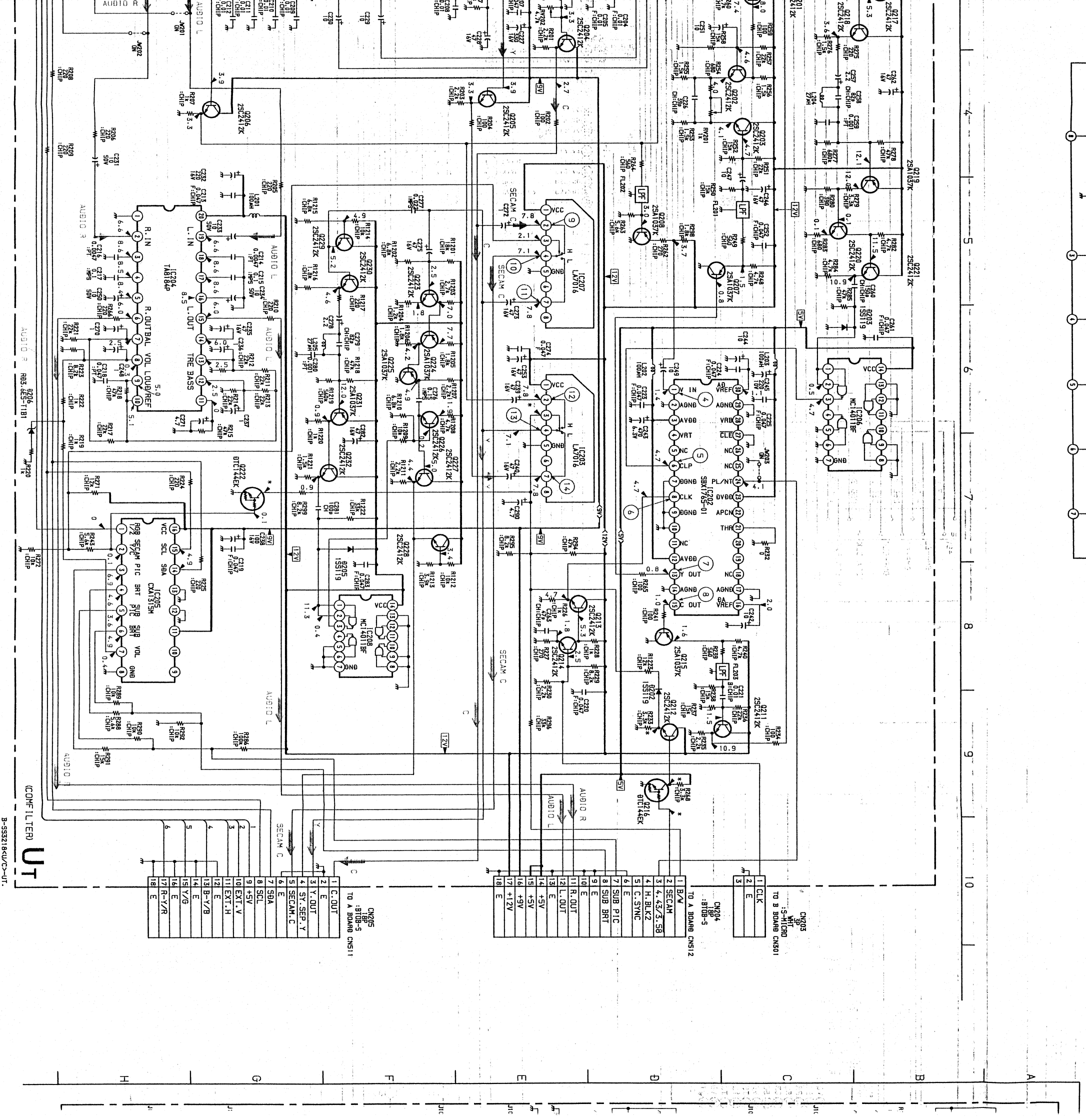
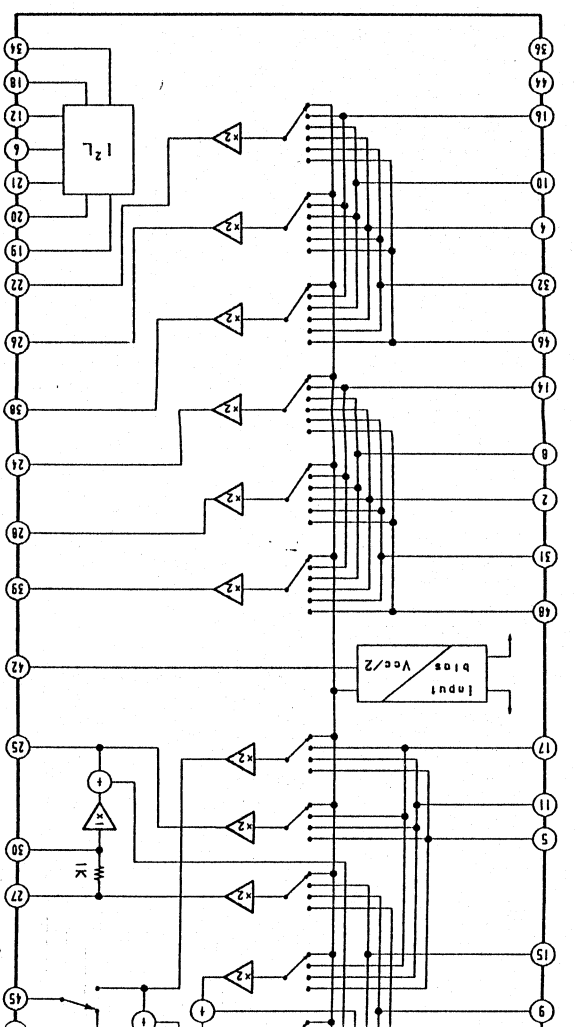
UT BOARD IC205



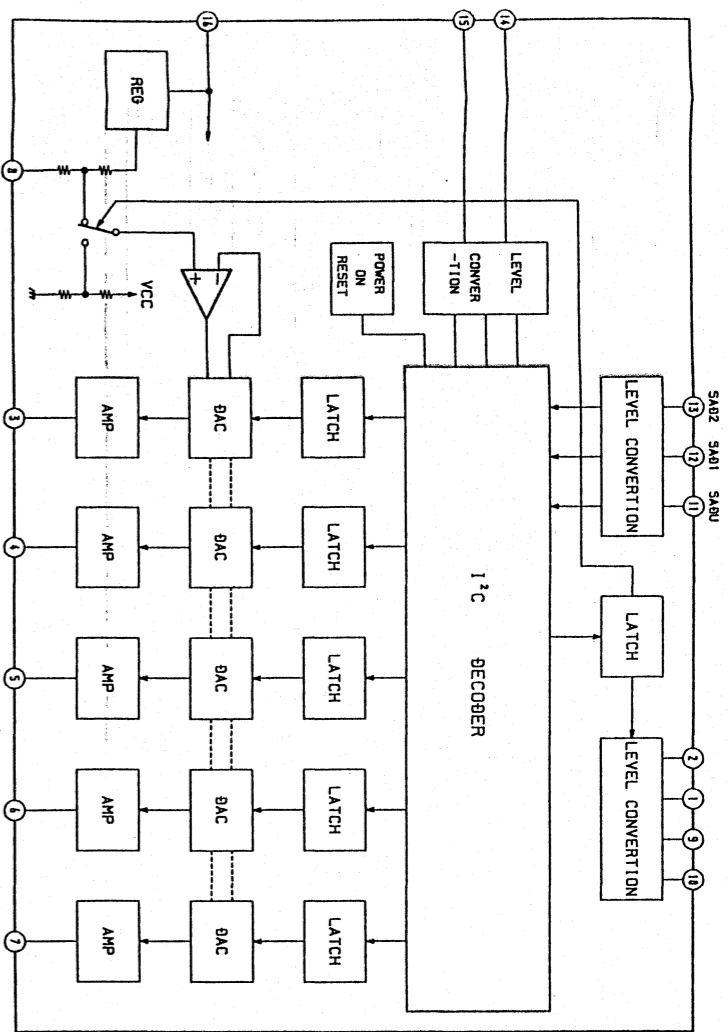
UT BOARD IC205 CXA1315M



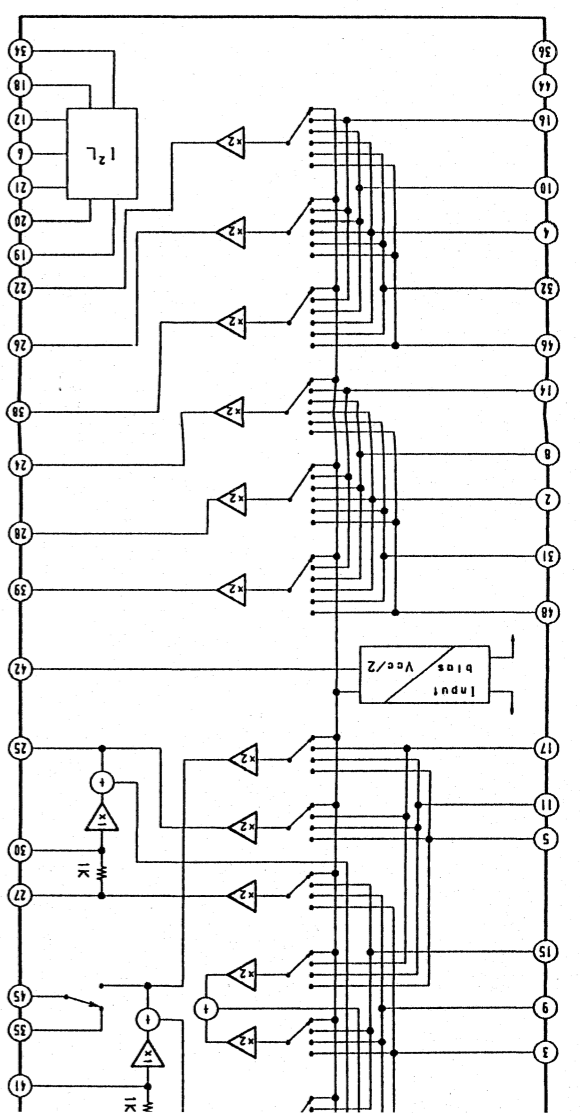
UT BOARD IC201 CXA1545AS



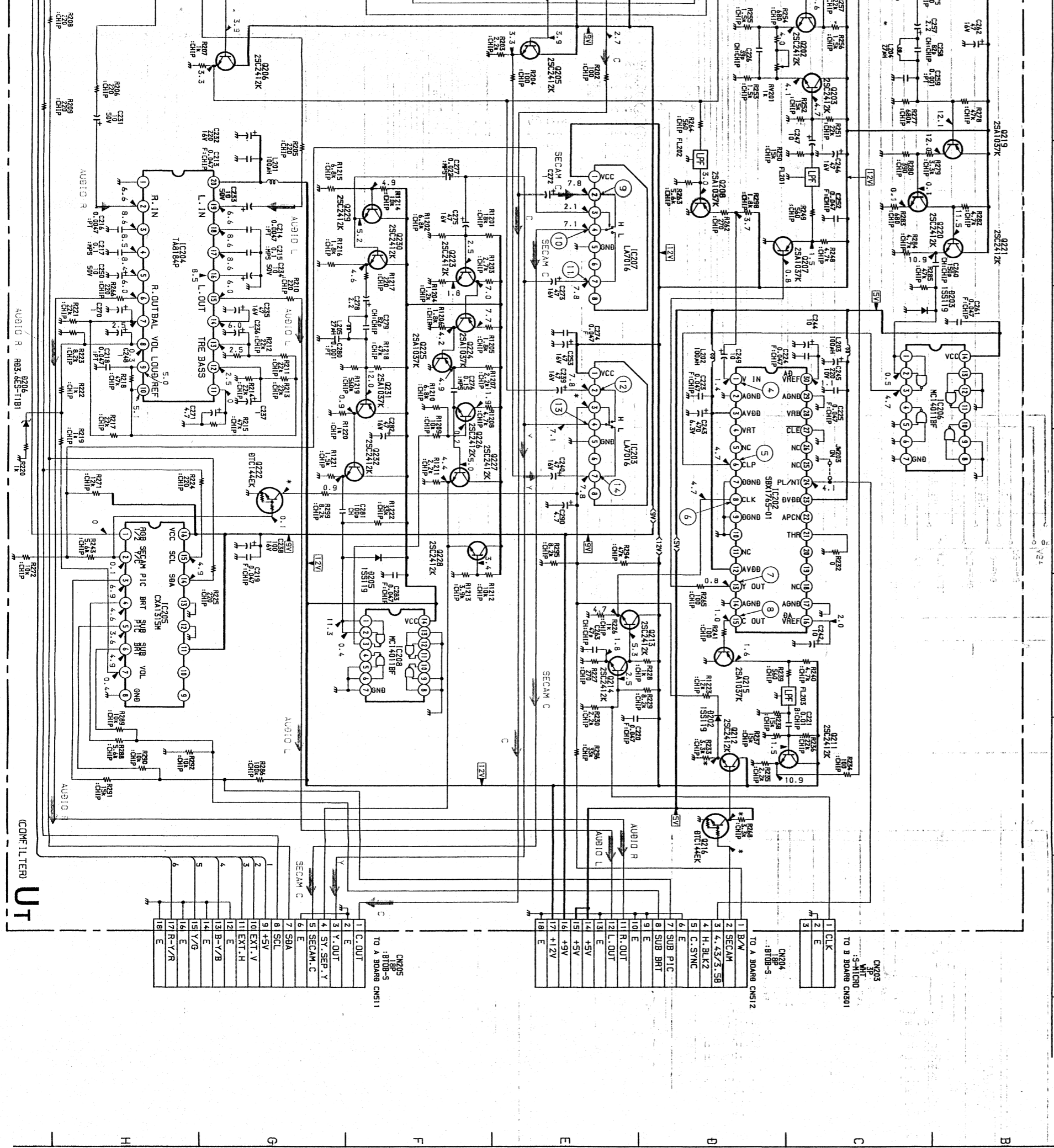
UT BOARD IC205 CXA1315M



UT BOARD IC201 CXA1545AS



4 5 6 7 8 9 10



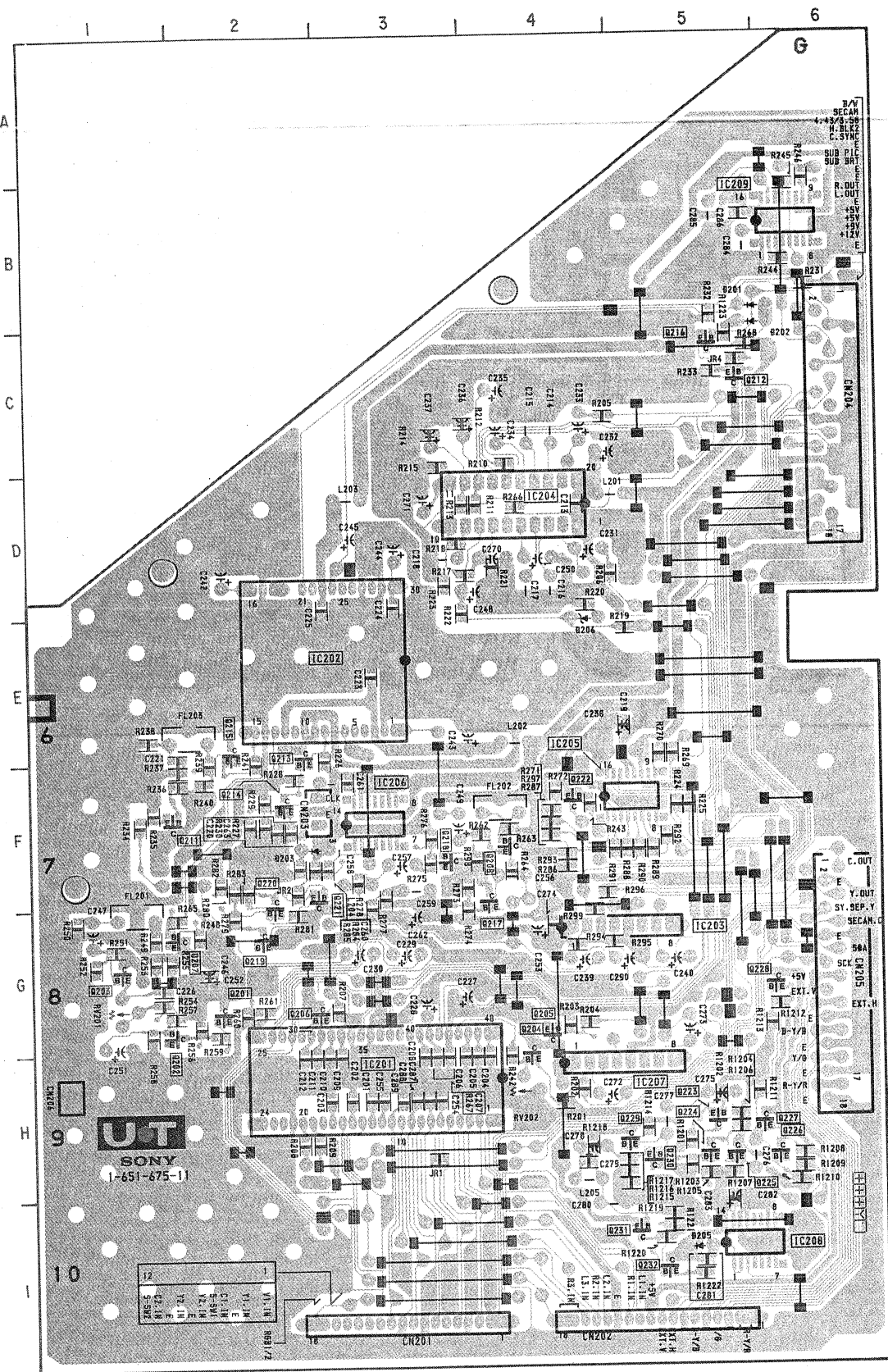
(CONF. LITER) UT

B-553218-4/UT-UT



UT [COM FILTER] UJ [INPUT] UA [AUDIO OUT, VISCA, SIRCS]

— UTBOARD —



# UT BOARD

## IC

IC201	H-3
IC202	E-2
IC203	G-5
IC204	D-4
IC205	F-5
IC206	F-3
IC207	H-5
IC208	I-5

## DIODE

D202	C-5
D203	F-2
D205	I-5
D206	E-4

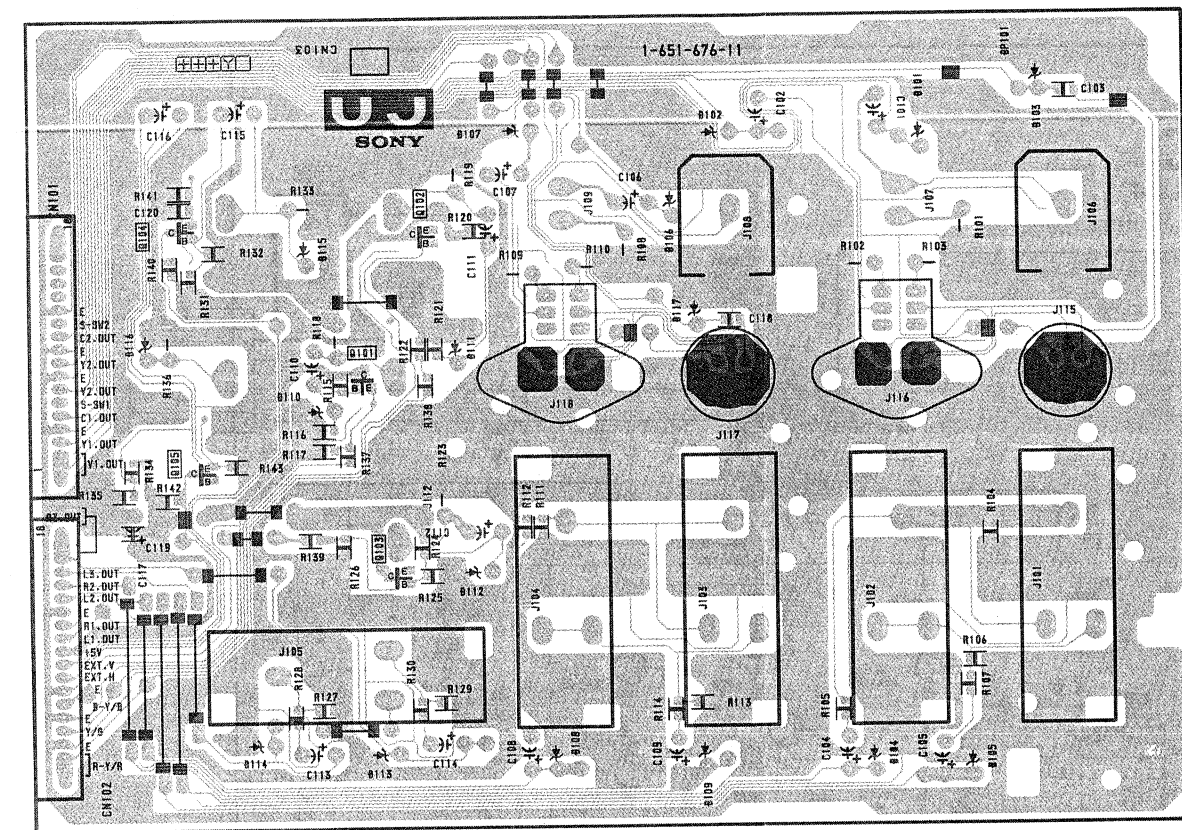
## TRANSISTOR

Q201	G-2
Q202	G-1
Q203	G-1
Q204	H-4
Q205	G-4
Q206	G-2
Q207	G-1
Q208	F-4
Q211	F-1
Q212	C-5
Q213	E-2
Q214	F-2
Q215	E-2
Q216	C-5
Q217	F-4
Q218	F-3
Q219	G-2
Q220	F-2
Q221	F-2
Q222	F-4
Q223	H-5
Q224	H-5
Q225	H-5
Q226	H-6
Q227	H-5
Q228	G-5
Q229	H-5
Q230	H-5
Q231	I-5
Q232	I-5

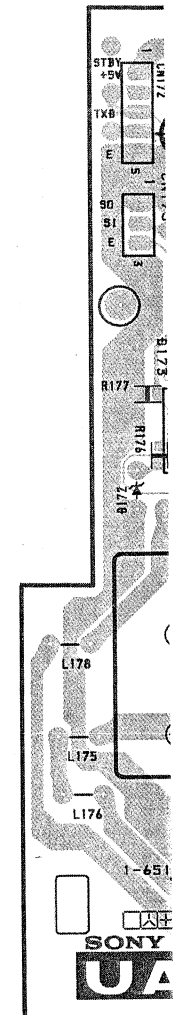
## VARIABLE RESISTOR

RV201	G-1
RV202	H-4

— UJ BOARD —



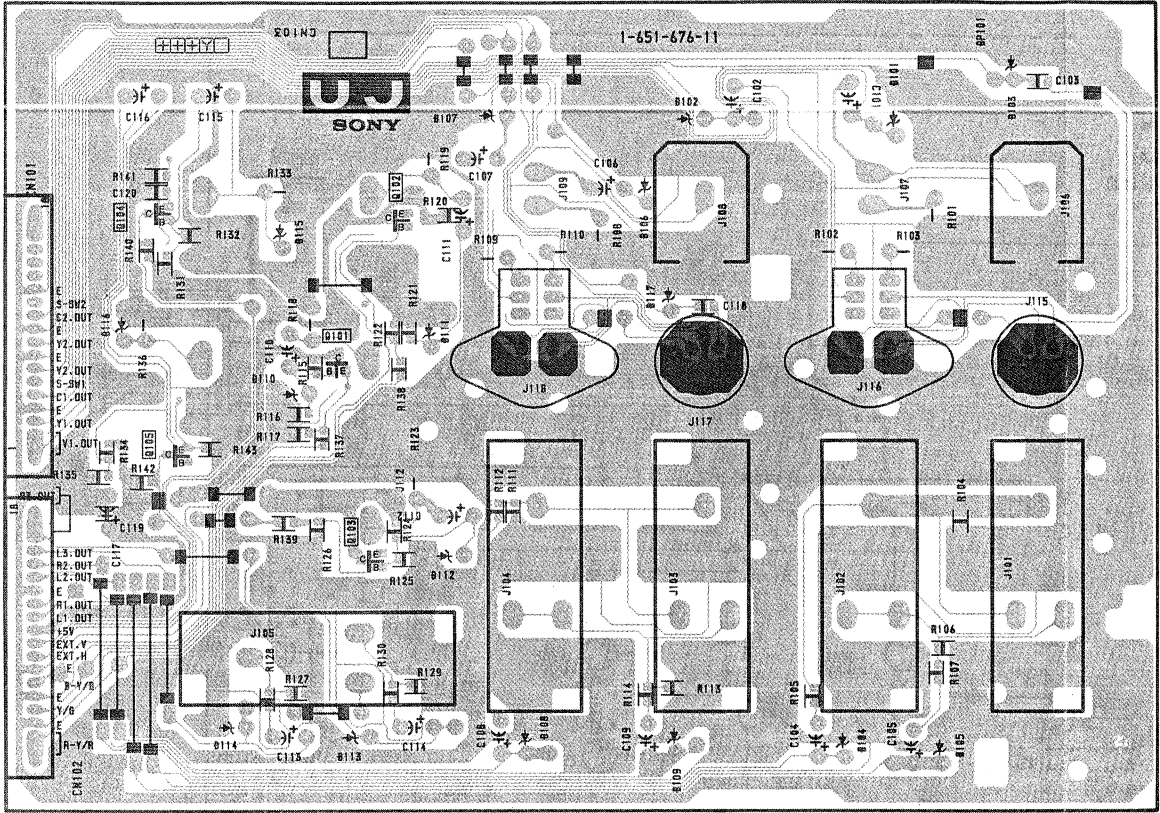
— UA BOARD —



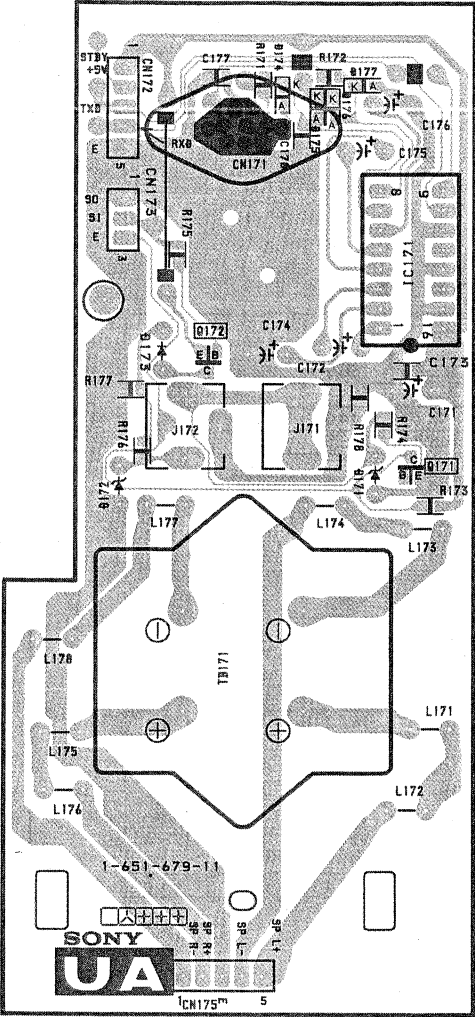
- UJ BOARD -

UT BOARD

IC	
IC201	H-3
IC202	E-2
IC203	G-5
IC204	D-4
IC205	F-5
IC206	F-3
IC207	H-5
IC208	I-5
DIODE	
D202	C-5
D203	F-2
D205	I-5
D206	E-4
TRANSISTOR	
Q201	G-2
Q202	G-1
Q203	G-1
Q204	H-4
Q205	G-4
Q206	G-2
Q207	G-1
Q208	F-4
Q211	F-1
Q212	C-5
Q213	E-2
Q214	F-2
Q215	E-2
Q216	C-5
Q217	F-4
Q218	F-3
Q219	G-2
Q220	F-2
Q221	F-2
Q222	F-4
Q223	H-5
Q224	H-5
Q225	H-5
Q226	H-6
Q227	H-5
Q228	G-5
Q229	H-5
Q230	H-5
Q231	I-5
Q232	I-5
VARIABLE RESISTOR	
RV201	G-1
RV202	H-4



- UA BOARD -



Schematic diagrams

board →

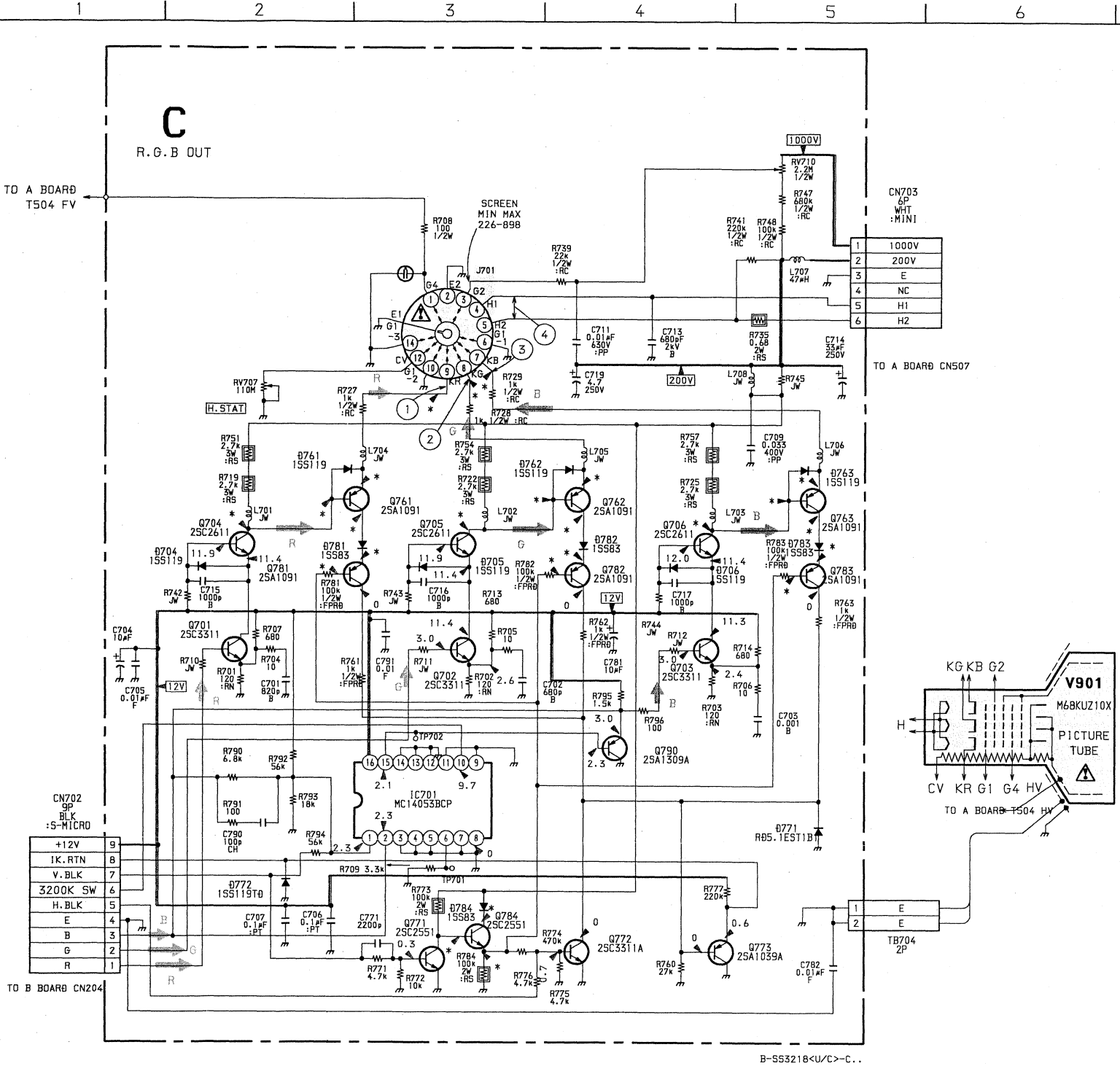
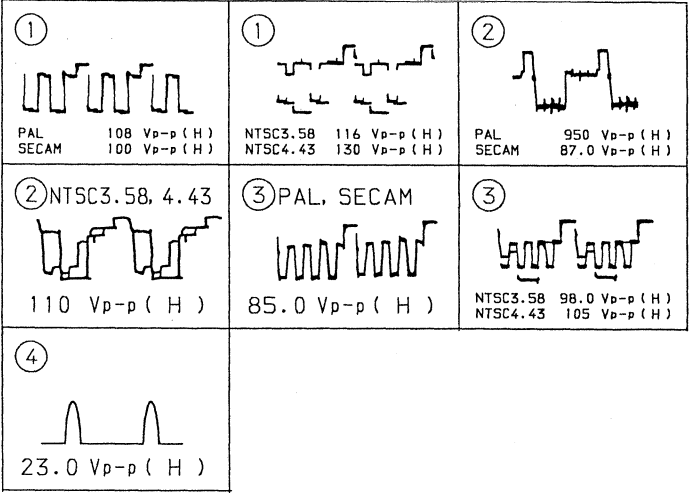
C BOARD

D704	PROTECT
D705	PROTECT
D706	PROTECT
D761	SPEED UP
D762	SPEED UP
D763	SPEED UP
D771	PROTECT
D772	PROTECT
D781	PROTECT
D782	PROTECT
D783	PROTECT
D784	BLK BUFF
IC701	3200 SW
Q701	R DRIVE
Q702	G DRIVE
Q703	B DRIVE
Q704	R OUT
Q705	G OUT
Q706	B OUT
Q761	IK DET
Q762	IK DET
Q763	IK DET
Q771	INVERT
Q772	BLK SW
Q773	IK BUFF
Q781	IK DET
Q782	IK DET
Q783	IK DET
Q784	BLK BUFF
Q790	B BUFF

C BOARD \* MARK

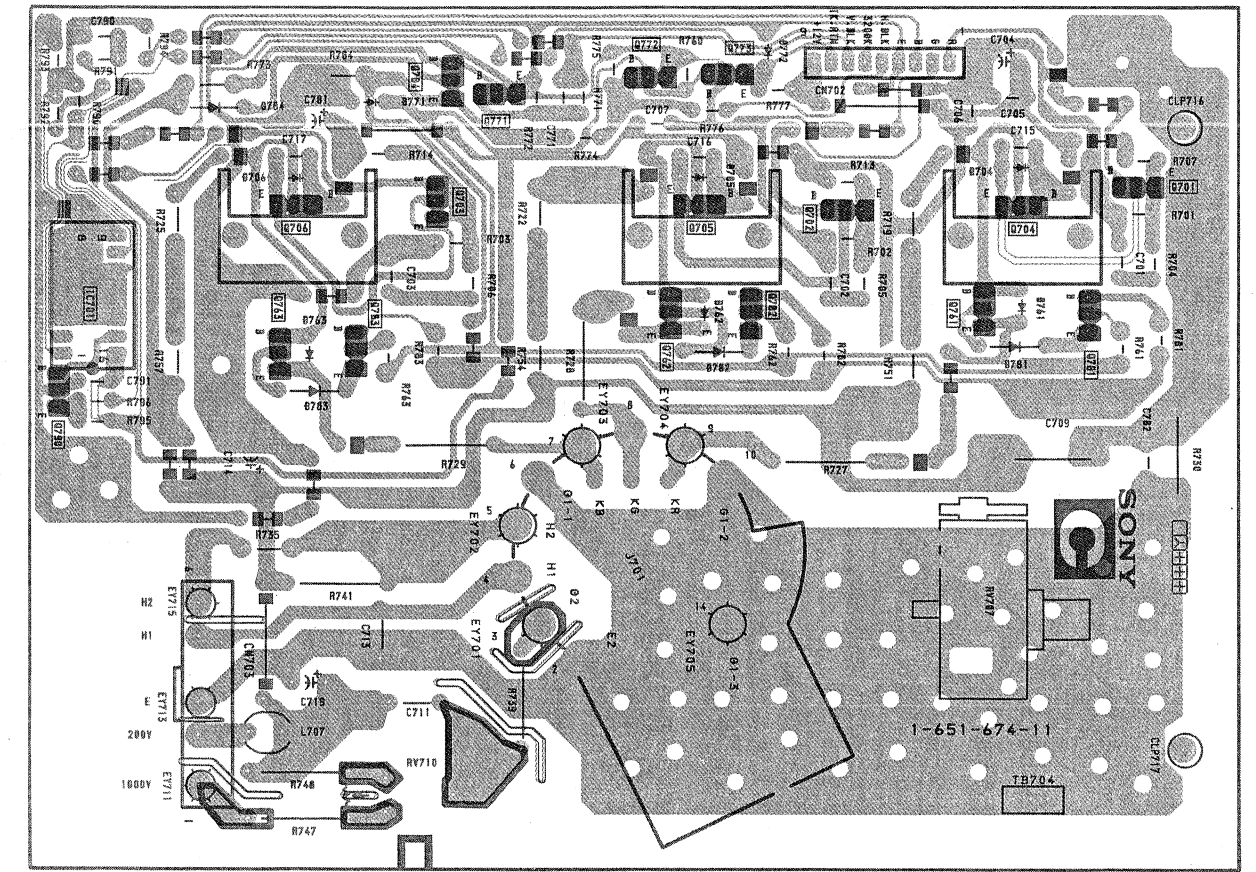
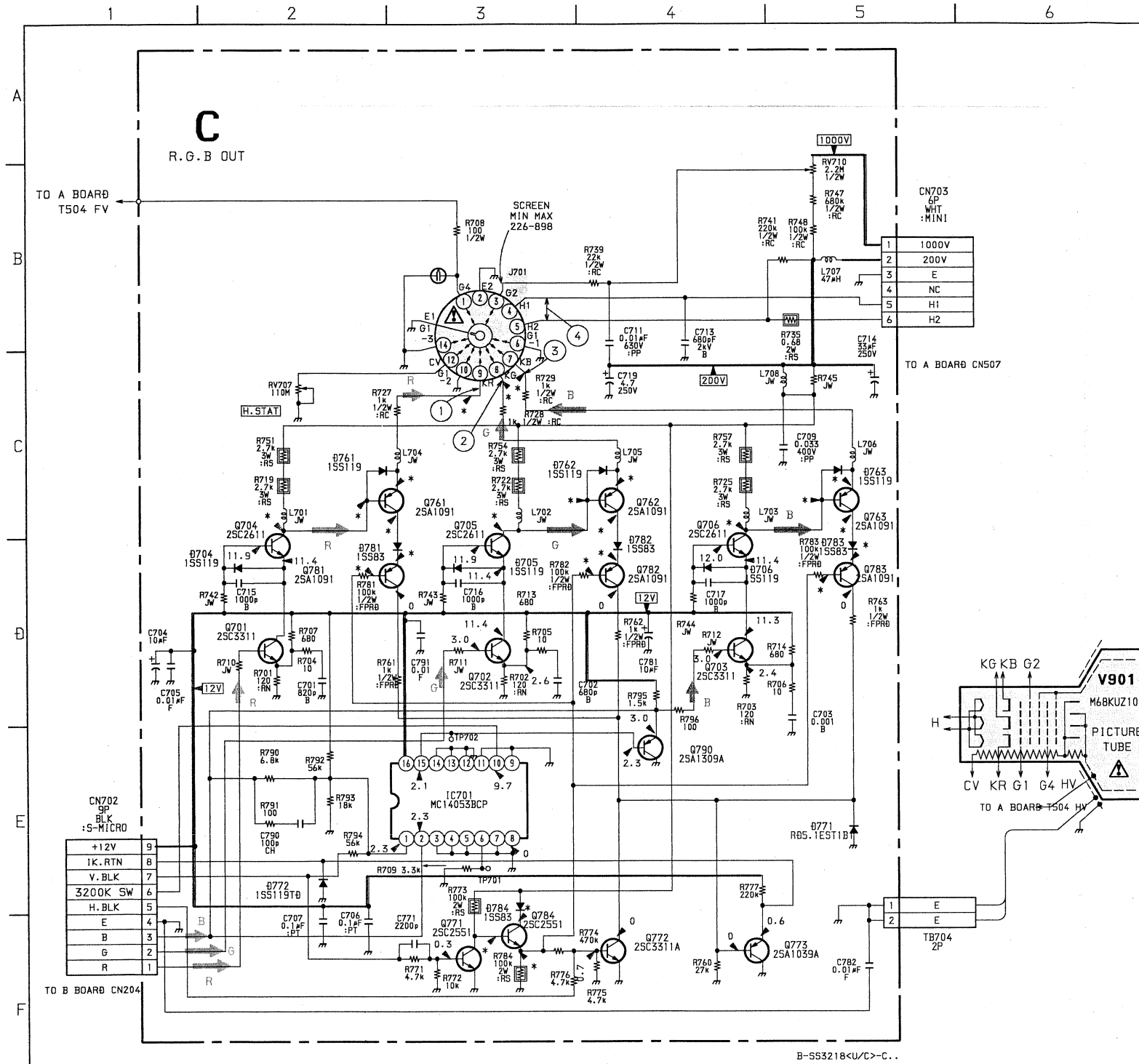
REF. NO	PAL	SECAM	NTSC 3.58	NTSC 4.43
J701 KB	165.8	166.9	164.9	163.7
RG	154.6	156.6	155.3	154.8
KR	143.7	144.6	145.6	146.2
Q704 C	145.2	146.5	147.2	147.3
Q705 C	158.4	160.7	159.1	158.3
Q706 C	168.1	169.2	166.6	165.6
Q761 B	145.1	146.2	147.3	147.3
C	129.2	133.0	129.8	128.8
E	143.0	144.0	145.1	145.5
Q762 B	158.3	160.5	159.3	158.5
C	140.8	143.4	139.6	139.4
E	154.3	156.4	155.2	154.6
Q763 B	168.0	169.2	166.9	165.7
C	153.6	154.6	149.3	148.6
E	165.6	166.9	164.7	163.5
Q771 C	182.0	182.2	179.0	179.8
Q781 B	181.5	181.5	178.9	178.9
E	169.9	172.0	167.8	172.4
Q783 B	181.4	181.5	178.9	179.0
E	169.7	171.0	167.3	168.2
Q784 B	182.1	182.2	179.5	179.6
C	197.7	197.8	197.2	197.3
E	183.2	183.4	180.6	180.7

C BOARD WAVEFORMS



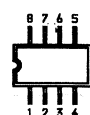
**C** [R. G. B OUT]

- C BOARD -



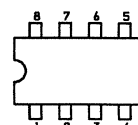
# 7-5. SEMICONDUCTORS

BA10358F  
X25040SI



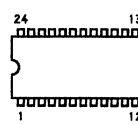
(TOP VIEW)

BA10358  
BA10393  
LM358N  
LM358P  
LM393P  
MM1170BFB  
M5216P  
μPC353C  
μPC393C



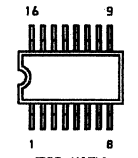
(TOP VIEW)

CXA1214P



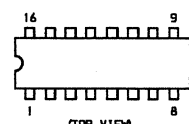
(TOP VIEW)

CXA1315M  
MC14053BFP  
MC74HC08AF-T2



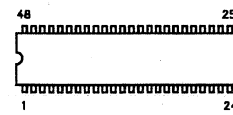
(TOP VIEW)

CXA1526P  
LA7220  
MAX232N  
MC14053BCP  
SN74LS221N  
μPD4053BC



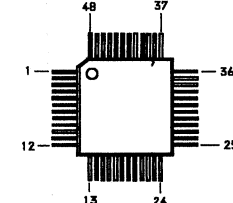
(TOP VIEW)

CXA1545AS  
CXA1739S



(TOP VIEW)

CX02018Q

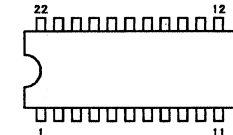


LA7016



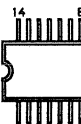
(TOP VIEW)

LA7851MK  
LA7856



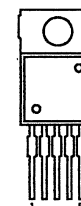
(TOP VIEW)

MC14011BF-T2  
MC14070BF  
MC74HC125AF  
MC74HC14AF-T2  
MC74HC32AF  
SN74HC04ANS  
SN74HC14ANS



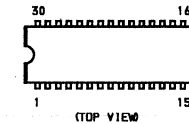
(TOP VIEW)

MC14052BF



(TOP VIEW)

M51279SP



(TOP VIEW)

PM-21



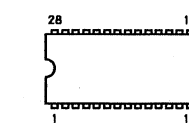
MARKING SIDE VIEW

PM-30



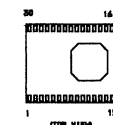
MARKING SIDE VIEW

SC402130B



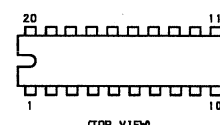
(TOP VIEW)

SBX1765-01



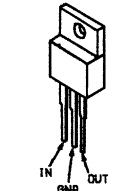
(TOP VIEW)

M52036SP  
TA8184P



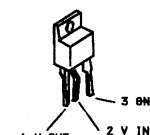
(TOP VIEW)

NJM78M05FA  
TA7805S  
TA7812S  
μPC7805H  
μPC7812H  
XRA178M05T

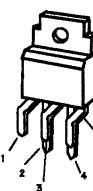


(TOP VIEW)

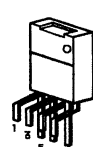
SE-135N



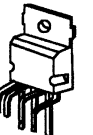
SI-3090CA



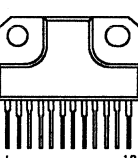
STR-M6515A



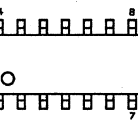
STV9379



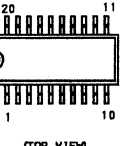
TA8200AH  
TA8216H



TC74HC164AF (EL)

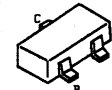


μPC645GT-625-E1



(TOP VIEW)

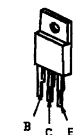
0TA114EK  
0TA144EK  
0TC144EK  
2SA1036K-R  
2SA1037-QR  
2SA1162G  
2SC1623-L5L6  
2SC2412K-QR



0TC144ES



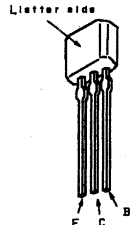
IRF614  
2SA1606-E  
2SB858-C  
2SB860  
2SC3298B-0  
2SC4159-E  
2SB1137  
2SB2012  
2SB2061-E, F



2SA1091-0  
2SC2551-0

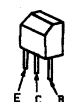


2SA1175-HFE  
2SA1309A  
2SC2785-HFE  
2SC3311A

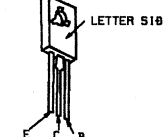


(TOP VIEW)

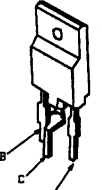
2SB733-34  
2SB734-4  
2SC3733  
2SB774-34



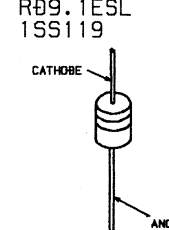
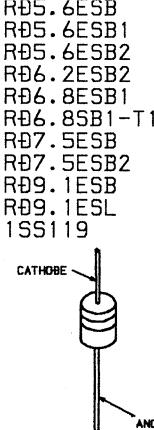
2SC2611  
2SC2688-LK  
2SC3840K



2SC4763 (LB SONY)  
2SK1916-53-F50  
2SK1916-53-F87

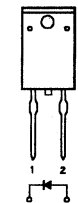


01N20R  
ERA38-06  
ERA81-004  
ERA82-004  
REA83-006  
ERA85-009  
R010ESB2  
R013ESB2  
R02.2ESB  
R02.2ESB2  
R03.6ESB1  
R033ESB2  
R039ESB2  
R039ESB4  
R05.1ESB  
R05.1ESB1  
R05.1SB1-T1  
R05.6ESB  
R05.6ESB1  
R05.6ESB2  
R06.2ESB2  
R06.8ESB1  
R06.8SB1-T1  
R07.5ESB  
R07.5ESB2  
R09.1ESB  
R09.1ESL  
1SS119

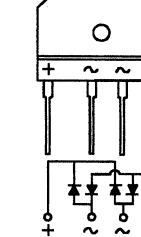


(TOP VIEW)

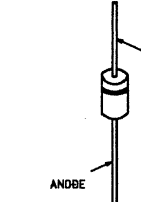
FML-G12S  
05L60



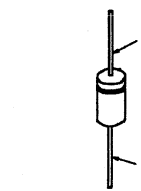
06SB60L



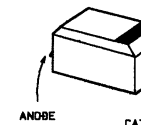
EGP100  
ERB24-060TP1  
ERC91-02  
RGP02-20EL-6394



EGP20G  
EL1Z  
GP080  
RGP02-17EL-6433  
RGP02-17PKG23  
RGP10GPKG23  
RGP15GPKG23  
RU30A  
1SS83

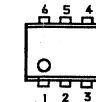


MA110

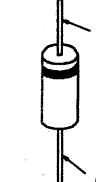


(TOP VIEW)

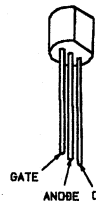
PC-111YS



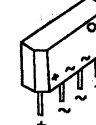
RU-3AM



SH0R3042



S1BV10-S  
S1BV40



## SECTION 8 EXPLODED VIEWS

### NOTE:

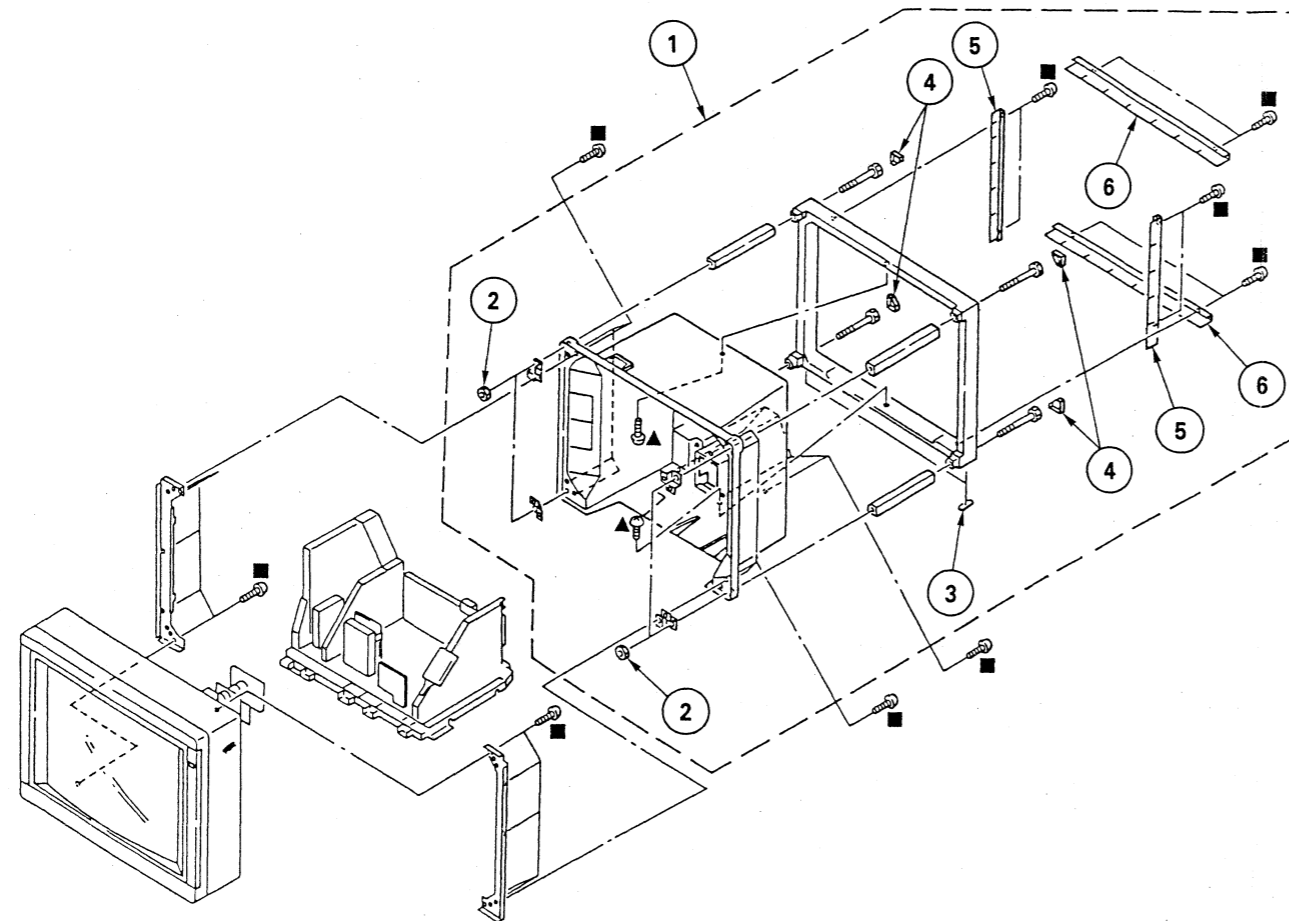
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

### 8-1. REAR COVER

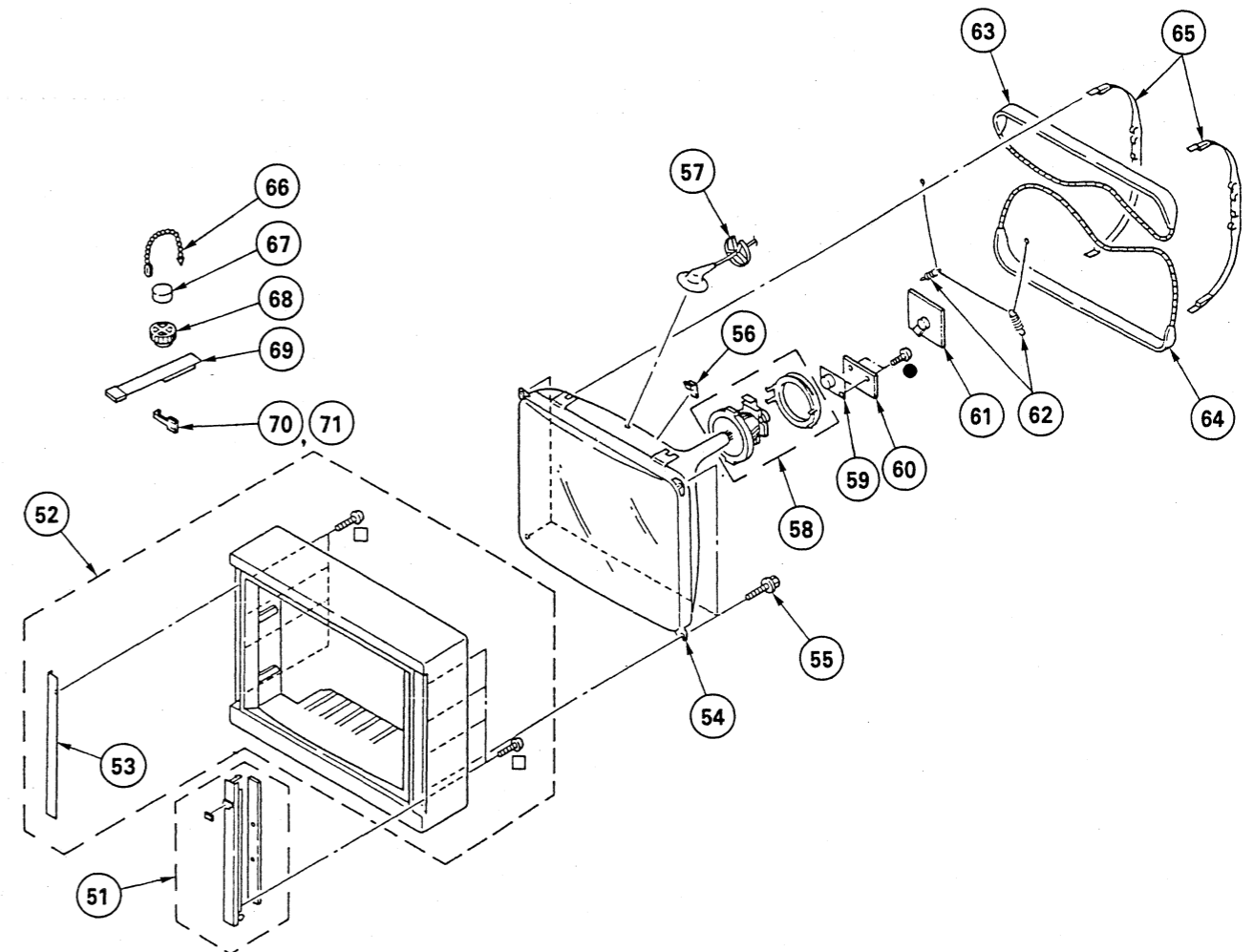
- $\Delta$ : BVTP 4x12 7-685-661-79
- : BVTP 4x16 7-685-663-79



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	X-4032-023-1	COVER ASSY, REAR	2-6
2	4-304-511-00	NUT (M5), FLANGE	
3	4-392-860-01	CUSHION (B)	
4	4-039-913-01	CAP	
5	4-039-918-01	BRACKET (V), REAR FRAME	
6	4-039-917-01	BRACKET (H), REAR FRAME	

### 8-2. PICTURE TUBE

- : BVTP 3x12 7-685-648-79
- : BV 3x25 7-685-152-19



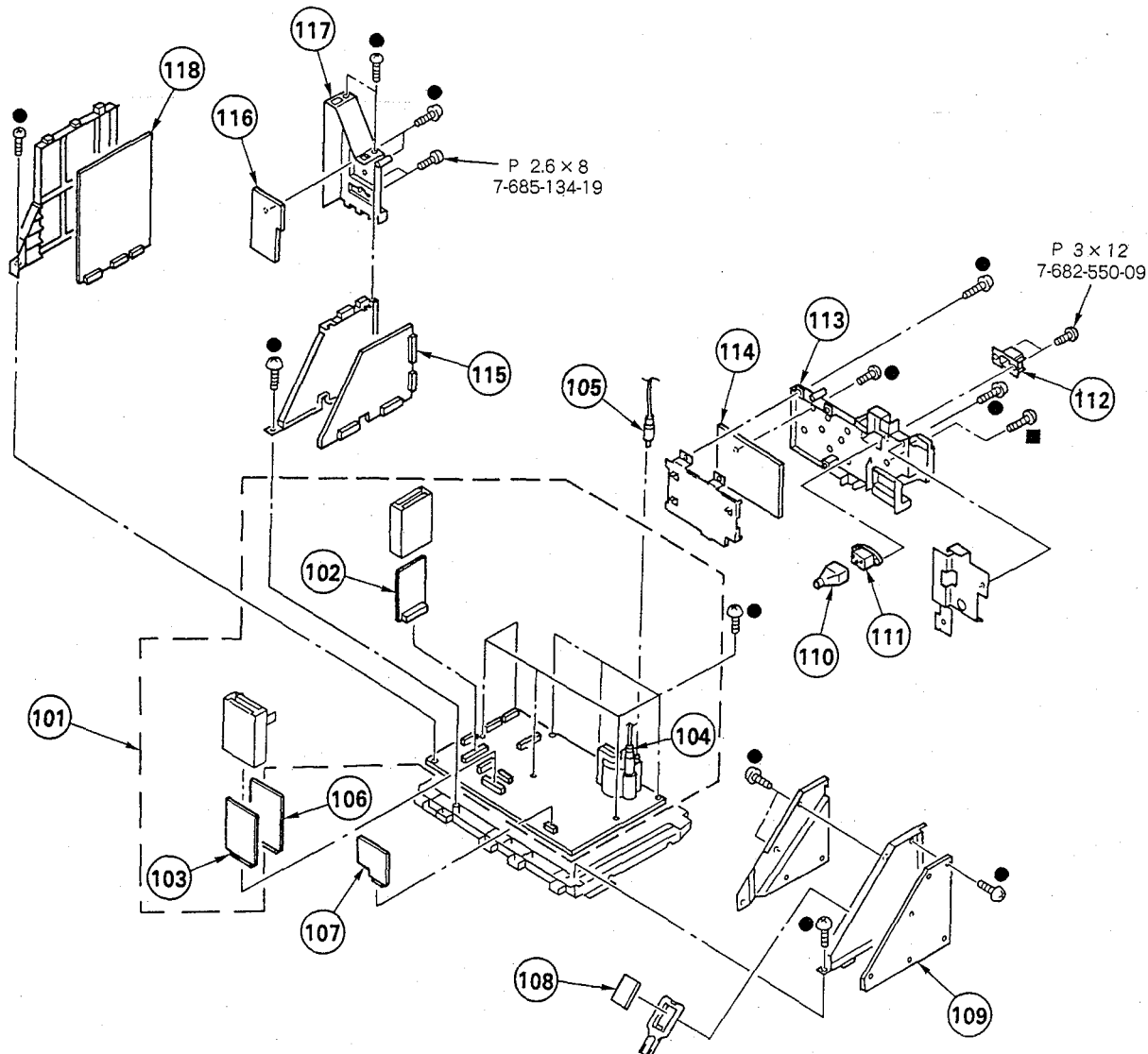
The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
51	1-467-794-11	KEY BOARD UNIT	53	63	Δ 1-402-715-21	COIL, DEMAGNETIZATION (PVM-2950QM)	
52	X-4032-024-1	BEZNET ASSY		64	Δ 1-426-573-22	COIL, DEGAUSSING (PVM-2950Q)	
53	4-045-431-01	PANEL, BLIND			Δ 1-402-716-21	COIL, DEMAGNETIZATION (PVM-2950QM)	
54	Δ 8-733-845-05	PICTURE TUBE (M68KU210X)			Δ 1-426-574-22	COIL, DEGAUSSING (PVM-2950Q)	
55	4-390-505-01	SCREW (7), TAPPING					
56	3-704-495-01	SPACER, DY		65	4-037-983-01	HOLDER, DGC	
57	*3-704-372-01	HOLDER, HV CABLE		66	4-308-870-00	CLIP, LEAD WIRE	
58	Δ 8-451-394-31	DEFLECTION YOKE (Y29EXA)		67	1-452-032-00	MAGNET, DISK; 10MM ϕ	
59	Δ 1-452-616-13	NECK ASSY, PICTURE TUBE (NA323)		68	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	
60	*A-1342-246-A	V BOARD, COMPLETE		69	X-4306-312-0	PERMALLOY ASSY, CONVERGENCE	
61	*A-1331-344-A	C BOARD, COMPLETE		70	4-034-272-01	PLATE, CORRECTION, TLV	
62	4-369-318-00	SPRING, TENSION		71	4-034-272-11	PLATE, CORRECTION, TLV	

### 8-3. CHASSIS

- : BVTP 3 × 12 7-685-648-79
- : BVTP 4 × 16 7-685-663-79



The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
101	*A-1297-256-A	A BOARD, COMPLETE (PVM-2950QM(AEP))		110	4-601-466-11	COVER, 3P INLET	
	*A-1297-382-A	A BOARD, COMPLETE (PVM-2950QM(AUS))	102, 103	111	$\Delta$ 1-580-375-11	INLET 3P	
	*A-1297-387-A	A BOARD, COMPLETE (PVM-2950Q)	102, 103	112	2-990-241-02	HOLDER (A), PLUG	
102	*A-1301-950-A	M BOARD, COMPLETE		113	4-045-440-01	BRACKET, UJ	
103	*A-1341-764-A	DX BOARD, COMPLETE		114	*A-1373-468-A	UJ BOARD, COMPLETE	
104	$\Delta$ X-4032-250-1	TRANSFORMER ASSY, FLYBACK		115	*A-1394-545-A	UT BOARD, COMPLETE	
105	1-900-140-13	LEAD ASSY, FOCUS		116	*A-1373-467-A	UA BOARD, COMPLETE	
106	*A-1347-093-A	VC BOARD, COMPLETE		117	4-045-439-01	BRACKET, UA	
107	*A-1372-005-A	H3 BOARD, COMPLETE		118	*A-1135-787-A	B BOARD, COMPLETE	
108	*A-1311-363-A	G1 BOARD, COMPLETE (PVM-2950Q)					
	*A-1311-365-A	G1 BOARD, COMPLETE (PVM-2950QM)					
109	*A-1316-181-A	G BOARD, COMPLETE (PVM-2950Q)					
	*A-1316-182-A	G BOARD, COMPLETE (PVM-2950QM)					

SECTION 9  
ELECTRICAL PARTS LIST

B

## NOTE:

The components identified by shading and mark  $\Delta$  are critical for safety.

Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

• Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

## RESISTORS

• All resistors are in ohms  
• F : nonflammable

When indicating parts by reference number, please include the board name.

## CAPACITORS

## COILS

• MF :  $\mu$ F, PF :  $\mu$ F • MMH : mH, UH :  $\mu$ H

• The components identified by  $\boxtimes$  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

• There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
*A-1135-787-A	B BOARD, COMPLETE	*****		C348	1-163-129-00	CERAMIC CHIP 330PF	5% 50V
				C349	1-163-243-11	CERAMIC CHIP 47PF	5% 50V
				C350	1-163-243-11	CERAMIC CHIP 47PF	5% 50V
				C351	1-163-129-00	CERAMIC CHIP 330PF	5% 50V
				C352	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
				C353	1-137-374-11	FILM 0.047MF	5% 50V
				C354	1-137-374-11	FILM 0.047MF	5% 50V
				C355	1-124-903-11	ELECT 1MF	20% 50V
				C356	1-124-902-00	ELECT 0.47MF	20% 50V
				C357	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
				C358	1-163-031-11	CERAMIC CHIP 0.01MF	5% 50V
				C359	1-163-237-11	CERAMIC CHIP 27PF	5% 50V
				C360	1-163-031-11	CERAMIC CHIP 0.01MF	5% 50V
				C361	1-130-483-00	MYLAR 0.01MF	5% 50V
				C362	1-124-927-11	ELECT 4.7MF	20% 50V
				C363	1-124-126-00	ELECT 47MF	20% 16V
				C364	1-163-031-11	CERAMIC CHIP 0.01MF	5% 50V
				C365	1-124-903-11	ELECT 1MF	20% 50V
				C366	1-163-031-11	CERAMIC CHIP 0.01MF	5% 50V
				C367	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
				C368	1-163-031-11	CERAMIC CHIP 0.01MF	5% 50V
				C369	1-163-031-11	CERAMIC CHIP 0.01MF	5% 50V
				C370	1-137-364-11	FILM 0.001MF	5% 50V
				C371	1-124-126-00	ELECT 47MF	20% 16V
				C372	1-163-035-00	CERAMIC CHIP 0.047MF	5% 50V
				C373	1-124-126-00	ELECT 47MF	20% 16V
				C374	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
				C379	1-137-399-11	FILM 0.1MF	5% 50V
				C380	1-163-019-00	CERAMIC CHIP 0.0068MF	10% 50V
				C381	1-126-964-11	ELECT 10MF	20% 50V
				C382	1-124-126-00	ELECT 47MF	20% 16V
				C383	1-137-399-11	FILM 0.1MF	5% 50V
				C384	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
				C385	1-163-103-00	CERAMIC CHIP 27PF	5% 50V
				C386	1-163-119-00	CERAMIC CHIP 120PF	5% 50V
				C387	1-136-165-00	FILM 0.1MF	5% 50V
				C388	1-130-489-00	FILM 0.033MF	5% 50V
				C389	1-124-126-00	ELECT 47MF	20% 16V
				C390	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
				C391	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
				C392	1-163-119-00	CERAMIC CHIP 120PF	5% 50V
				C393	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
				C394	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
				C395	1-163-035-00	CERAMIC CHIP 0.047MF	5% 50V
				C396	1-124-126-00	ELECT 47MF	20% 16V
				C397	1-137-399-11	FILM 0.1MF	5% 50V
				C398	1-137-399-11	FILM 0.1MF	5% 50V
				C399	1-163-119-00	CERAMIC CHIP 120PF	5% 50V
				C400	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
				C401	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
				C402	1-124-126-00	ELECT 47MF	20% 16V

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B


REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
IC319	8-759-300-71	IC HD14053BFP		Q342	8-729-216-22	TRANSISTOR 2SA1162-G	
IC320	8-759-300-71	IC HD14053BFP		Q343	8-729-216-22	TRANSISTOR 2SA1162-G	
<COIL>				Q344	8-729-901-01	TRANSISTOR DTC144EK	
L301	1-408-411-00	INDUCTOR 15UH		Q345	8-729-901-01	TRANSISTOR DTC144EK	
L302	1-408-411-00	INDUCTOR 15UH		Q346	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L303	1-408-411-00	INDUCTOR 15UH		Q347	8-729-901-01	TRANSISTOR DTC144EK	
L304	1-408-405-00	INDUCTOR 4.7UH		Q348	8-729-901-01	TRANSISTOR DTC144EK	
L305	1-408-401-00	INDUCTOR 2.2UH		Q349	8-729-901-01	TRANSISTOR DTC144EK	
L306	1-408-401-00	INDUCTOR 2.2UH		Q352	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L307	1-408-409-00	INDUCTOR 10UH		Q354	8-729-901-01	TRANSISTOR DTC144EK	
L308	1-410-476-11	INDUCTOR 33UH		Q355	8-729-901-01	TRANSISTOR DTC144EK	
L309	1-408-409-00	INDUCTOR 10UH		Q356	8-729-216-22	TRANSISTOR 2SA1162-G	
L310	1-408-609-41	INDUCTOR 33UH		Q357	8-729-216-22	TRANSISTOR 2SA1162-G	
L311	1-408-411-00	INDUCTOR 15UH		Q358	8-729-901-01	TRANSISTOR DTC144EK	
<VARIABLE COIL>				Q359	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
LV301	1-404-496-00	COIL		Q361	8-729-901-01	TRANSISTOR DTC144EK	
LV302	1-404-496-00	COIL		Q362	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
<TRANSISTOR>				Q363	8-729-901-01	TRANSISTOR DTC144EK	
Q301	8-729-216-22	TRANSISTOR 2SA1162-G		<RESISTOR>			
Q302	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR306	1-216-295-91	METAL GLAZE 0 5% 1/10W	
Q303	8-729-216-22	TRANSISTOR 2SA1162-G		JR308	1-216-295-91	METAL GLAZE 0 5% 1/10W	
Q304	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR309	1-216-295-91	METAL GLAZE 0 5% 1/10W	
Q305	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR321	1-216-295-91	METAL GLAZE 0 5% 1/10W	
Q306	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR322	1-216-295-91	METAL GLAZE 0 5% 1/10W	
Q307	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR323	1-216-296-91	METAL GLAZE 0 5% 1/8W	
Q308	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR324	1-216-296-91	METAL GLAZE 0 5% 1/8W	
Q309	8-729-216-22	TRANSISTOR 2SA1162-G		JR325	1-216-296-91	METAL GLAZE 0 5% 1/8W	
Q311	8-729-216-22	TRANSISTOR 2SA1162-G		JR326	1-216-296-91	METAL GLAZE 0 5% 1/8W	
Q312	8-729-216-22	TRANSISTOR 2SA1162-G		JR327	1-216-296-91	METAL GLAZE 0 5% 1/8W	
Q313	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR328	1-216-296-91	METAL GLAZE 0 5% 1/8W	
Q314	8-729-216-22	TRANSISTOR 2SA1162-G		JR329	1-216-296-91	METAL GLAZE 0 5% 1/8W	
Q315	8-729-216-22	TRANSISTOR 2SA1162-G		JR330	1-216-295-91	METAL GLAZE 0 5% 1/10W	
Q316	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR331	1-216-296-91	METAL GLAZE 0 5% 1/8W	
Q317	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR332	1-216-295-91	METAL GLAZE 0 5% 1/10W	
Q318	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR333	1-216-296-91	METAL GLAZE 0 5% 1/8W	
Q319	8-729-216-22	TRANSISTOR 2SA1162-G		JR334	1-216-296-91	METAL GLAZE 0 5% 1/8W	
Q320	8-729-216-22	TRANSISTOR 2SA1162-G		JR356	1-216-296-91	METAL GLAZE 0 5% 1/8W	
Q321	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR360	1-216-295-91	METAL GLAZE 0 5% 1/10W	
Q322	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR520	1-216-296-91	METAL GLAZE 0 5% 1/8W	
Q323	8-729-216-22	TRANSISTOR 2SA1162-G		JR521	1-216-295-91	METAL GLAZE 0 5% 1/10W	
Q324	8-729-216-22	TRANSISTOR 2SA1162-G		JR524	1-216-296-91	METAL GLAZE 0 5% 1/8W	
Q325	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR525	1-216-295-91	METAL GLAZE 0 5% 1/10W	
Q326	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR526	1-216-295-91	METAL GLAZE 0 5% 1/10W	
Q327	8-729-216-22	TRANSISTOR 2SA1162-G		JR529	1-216-295-91	METAL GLAZE 0 5% 1/10W	
Q328	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R301	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q329	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R302	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q330	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R303	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W	
Q331	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R304	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
Q332	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R305	1-216-647-11	METAL CHIP 680 0.50% 1/10W	
Q333	8-729-216-22	TRANSISTOR 2SA1162-G		R306	1-216-647-11	METAL CHIP 680 0.50% 1/10W	
Q334	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R307	1-216-025-00	METAL GLAZE 100 5% 1/10W	
Q335	8-729-216-22	TRANSISTOR 2SA1162-G		R308	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W	
Q336	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R309	1-216-043-00	METAL GLAZE 560 5% 1/10W	
Q337	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R310	1-216-105-00	METAL GLAZE 220K 5% 1/10W	
Q338	8-729-216-22	TRANSISTOR 2SA1162-G		R311	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
Q339	8-729-216-22	TRANSISTOR 2SA1162-G		R312	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q340	8-729-216-22	TRANSISTOR 2SA1162-G		R313	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
Q341	8-729-216-22	TRANSISTOR 2SA1162-G		R314	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W	
				R315	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
				R316	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
				R317	1-216-049-00	METAL GLAZE 1K 5% 1/10W	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R318	1-216-133-00	METAL GLAZE	3.3M 5% 1/10W	R384	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R319	1-216-045-00	METAL GLAZE	680 5% 1/10W	R385	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R320	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R386	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R321	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R387	1-216-689-11	METAL GLAZE	39K 5% 1/10W
R322	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W	R388	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R323	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R389	1-216-041-00	METAL GLAZE	470 5% 1/10W
R324	1-216-079-00	METAL GLAZE	18K 5% 1/10W	R390	1-216-095-00	METAL GLAZE	82K 5% 1/10W
R325	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R391	1-216-103-91	METAL GLAZE	180K 5% 1/10W
R326	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R392	1-216-679-11	METAL CHIP	15K 0.50% 1/10W
R327	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	R393	1-216-667-11	METAL CHIP	4.7K 0.50% 1/10W
R328	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W	R394	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R329	1-216-041-00	METAL GLAZE	470 5% 1/10W	R395	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R330	1-216-045-00	METAL GLAZE	680 5% 1/10W	R396	1-216-133-00	METAL GLAZE	3.3M 5% 1/10W
R331	1-216-089-91	METAL GLAZE	47K 5% 1/10W	R397	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
R332	1-216-115-00	METAL GLAZE	560K 5% 1/10W	R398	1-216-093-00	METAL GLAZE	68K 5% 1/10W
R334	1-216-033-00	METAL GLAZE	220 5% 1/10W	R399	1-216-095-00	METAL GLAZE	82K 5% 1/10W
R335	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R400	1-216-109-00	METAL GLAZE	330K 5% 1/10W
R336	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R401	1-216-105-00	METAL GLAZE	220K 5% 1/10W
R337	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W	R402	1-216-101-00	METAL GLAZE	150K 5% 1/10W
R339	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W	R403	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R340	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	R404	1-216-101-00	METAL GLAZE	150K 5% 1/10W
R341	1-216-091-00	METAL GLAZE	56K 5% 1/10W	R405	1-216-101-00	METAL GLAZE	150K 5% 1/10W
R342	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R406	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R343	1-216-103-91	METAL GLAZE	180K 5% 1/10W	R407	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R344	1-216-113-00	METAL GLAZE	470K 5% 1/10W	R408	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R345	1-216-103-91	METAL GLAZE	180K 5% 1/10W	R409	1-216-029-00	METAL GLAZE	150 5% 1/10W
R346	1-216-107-00	METAL GLAZE	270K 5% 1/10W	R410	1-216-029-00	METAL GLAZE	150 5% 1/10W
R347	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R411	1-216-041-00	METAL GLAZE	470 5% 1/10W
R348	1-216-113-00	METAL GLAZE	470K 5% 1/10W	R412	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
R349	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	R413	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R350	1-216-075-00	METAL GLAZE	12K 5% 1/10W	R414	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R351	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R415	1-216-045-00	METAL GLAZE	680 5% 1/10W
R352	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R416	1-216-043-00	METAL GLAZE	560 5% 1/10W
R353	1-216-033-00	METAL GLAZE	220 5% 1/10W	R417	1-216-037-00	METAL GLAZE	330 5% 1/10W
R354	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R418	1-216-043-00	METAL GLAZE	560 5% 1/10W
R355	1-216-089-91	METAL GLAZE	47K 5% 1/10W	R419	1-216-037-00	METAL GLAZE	330 5% 1/10W
R356	1-216-033-00	METAL GLAZE	220 5% 1/10W	R420	1-216-047-00	METAL GLAZE	820 5% 1/10W
R357	1-216-033-00	METAL GLAZE	220 5% 1/10W	R421	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R358	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R422	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
R359	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R423	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W
R360	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R424	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R361	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R425	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R362	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R426	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R363	1-216-093-00	METAL GLAZE	68K 5% 1/10W	R427	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W
R364	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W	R428	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R365	1-216-662-11	METAL CHIP	3K 0.50% 1/10W	R429	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W
R366	1-216-017-00	METAL GLAZE	47 5% 1/10W	R430	1-216-039-00	METAL GLAZE	390 5% 1/10W
R367	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R431	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W
R368	1-216-041-00	METAL GLAZE	470 5% 1/10W	R432	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
R369	1-216-041-00	METAL GLAZE	470 5% 1/10W	R433	1-216-031-00	METAL GLAZE	180 5% 1/10W
R370	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R434	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R371	1-216-295-91	METAL GLAZE	0 5% 1/10W	R435	1-216-039-00	METAL GLAZE	390 5% 1/10W
R372	1-216-025-00	METAL GLAZE	100 5% 1/10W	R437	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R373	1-216-025-00	METAL GLAZE	100 5% 1/10W	R438	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W
R374	1-216-295-91	METAL GLAZE	0 5% 1/10W	R439	1-216-029-00	METAL GLAZE	150 5% 1/10W
R375	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R441	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R376	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R442	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R377	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R443	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R378	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W	R445	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
R379	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R446	1-216-043-00	METAL GLAZE	560 5% 1/10W
R380	1-216-041-00	METAL GLAZE	470 5% 1/10W	R447	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R381	1-216-041-00	METAL GLAZE	470 5% 1/10W	R448	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W
R382	1-216-105-00	METAL GLAZE	220K 5% 1/10W	R449	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R383	1-216-113-00	METAL GLAZE	470K 5% 1/10W				

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R450	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R1322	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R451	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1323	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R452	1-216-222-00	METAL GLAZE	10K 5% 1/8W	R1324	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R454	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R1327	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R455	1-216-651-11	METAL CHIP	1K 0.50% 1/10W	R1328	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R456	1-216-651-11	METAL CHIP	1K 0.50% 1/10W	R1332	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W
R457	1-216-047-00	METAL GLAZE	820 5% 1/10W	R1333	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R458	1-216-043-00	METAL GLAZE	560 5% 1/10W	R1334	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R459	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R1335	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R460	1-216-083-00	METAL GLAZE	27K 5% 1/10W	R1336	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R461	1-216-047-00	METAL GLAZE	820 5% 1/10W	R1337	1-216-085-00	METAL GLAZE	33K 5% 1/10W
R462	1-216-075-00	METAL GLAZE	12K 5% 1/10W	R1338	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R463	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R1339	1-216-689-11	METAL GLAZE	39K 5% 1/10W
R464	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	R1340	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R465	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1341	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R467	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1342	1-216-095-00	METAL GLAZE	82K 5% 1/10W
R468	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R1343	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R470	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R1344	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R471	1-216-025-00	METAL GLAZE	100 5% 1/10W	R1348	1-216-029-00	METAL GLAZE	150 5% 1/10W
R472	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	R1349	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R473	1-216-025-00	METAL GLAZE	100 5% 1/10W	R1350	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R474	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R1351	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R476	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	R1352	1-216-103-91	METAL GLAZE	180K 5% 1/10W
R477	1-216-025-00	METAL GLAZE	100 5% 1/10W	R1353	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R478	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R1354	1-216-045-00	METAL GLAZE	680 5% 1/10W
R480	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	R1355	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R481	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R1356	1-216-079-00	METAL GLAZE	18K 5% 1/10W
R482	1-216-025-00	METAL GLAZE	100 5% 1/10W	R1359	1-216-093-00	METAL GLAZE	68K 5% 1/10W
R483	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	R1360	1-216-017-00	METAL GLAZE	47 5% 1/10W
R484	1-216-025-00	METAL GLAZE	100 5% 1/10W	R1361	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W
R485	1-216-025-00	METAL GLAZE	100 5% 1/10W	R1362	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W
R486	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R1363	1-216-017-00	METAL GLAZE	47 5% 1/10W
R487	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1364	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R488	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R1365	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R489	1-216-025-00	METAL GLAZE	100 5% 1/10W	R1366	1-216-083-00	METAL GLAZE	27K 5% 1/10W
R490	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	R1367	1-216-240-00	METAL GLAZE	56K 5% 1/8W
R491	1-216-025-00	METAL GLAZE	100 5% 1/10W	<VARIABLE RESISTOR>			
R492	1-216-073-00	METAL GLAZE	10K 5% 1/10W	RV301	1-241-763-11	RES, ADJ, CARBON	4.7K
R493	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	RV302	1-241-628-11	RES, ADJ, CARBON	2.2K
R494	1-216-073-00	METAL GLAZE	10K 5% 1/10W	RV305	1-241-763-11	RES, ADJ, CARBON	4.7K
R495	1-216-073-00	METAL GLAZE	10K 5% 1/10W	RV306	1-241-765-11	RES, ADJ, CARBON	22K
R496	1-216-049-00	METAL GLAZE	1K 5% 1/10W	RV307	1-238-019-11	RES, ADJ, CARBON	47K
R497	1-216-295-91	METAL GLAZE	0 5% 1/10W	RV308	1-238-019-11	RES, ADJ, CARBON	47K
R498	1-216-073-00	METAL GLAZE	10K 5% 1/10W	RV309	1-238-019-11	RES, ADJ, CARBON	47K
R499	1-216-073-00	METAL GLAZE	10K 5% 1/10W	RV310	1-241-630-11	RES, ADJ, CARBON	10K
R1300	1-216-073-00	METAL GLAZE	10K 5% 1/10W	RV311	1-241-630-11	RES, ADJ, CARBON	10K
R1301	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	RV312	1-241-630-11	RES, ADJ, CARBON	10K
R1302	1-216-037-00	METAL GLAZE	330 5% 1/10W	RV313	1-241-760-11	RES, ADJ, CARBON	470
R1303	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	RV314	1-241-760-11	RES, ADJ, CARBON	470
R1304	1-216-049-00	METAL GLAZE	1K 5% 1/10W	<TRANSFORMER>			
R1305	1-216-039-00	METAL GLAZE	390 5% 1/10W	T301	1-404-584-11	COIL	
R1306	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	<CRYSTAL>			
R1307	1-216-025-00	METAL GLAZE	100 5% 1/10W	X301	1-527-722-00	OSCILLATOR, CRYSTAL	
R1308	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	X302	1-579-057-11	VIBRATOR, CRYSTAL	
R1309	1-216-073-00	METAL GLAZE	10K 5% 1/10W	*****			
R1310	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R1311	1-215-413-00	METAL	470 1% 1/4W				
R1312	1-216-659-11	METAL CHIP	2.2K 0.50% 1/10W				
R1313	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R1314	1-216-075-00	METAL GLAZE	12K 5% 1/10W				
R1315	1-216-033-00	METAL GLAZE	220 5% 1/10W				
R1316	1-216-033-00	METAL GLAZE	220 5% 1/10W				
R1320	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R1321	1-216-079-00	METAL GLAZE	18K 5% 1/10W				

Les composants identifiés par une trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

A

— 107 —

— 108 —

Les composants identifiés par une trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

A

— 109 —

A

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
<RESISTOR>							
R522	1-249-411-11	CARBON	330 5% 1/4W	R589	1-249-441-11	CARBON	100K 5% 1/4W
R523	1-249-423-11	CARBON	3.3K 5% 1/4W	R590	1-247-901-11	CARBON	820K 5% 1/4W
R524	1-260-331-11	CARBON	1.8K 5% 1/2W	R591	1-215-881-11	METAL OXIDE	15 5% 2W F
R525	1-216-480-11	METAL OXIDE	820 5% 3W F	R592	1-260-320-11	CARBON	220 5% 1/2W
R526	1-216-480-11	METAL OXIDE	820 5% 3W F	R598	1-215-882-00	METAL OXIDE	22 5% 2W F
R527	1-249-401-11	CARBON	47 5% 1/4W	R599	1-249-437-11	CARBON	47K 5% 1/4W
R528	1-249-397-11	CARBON	22 5% 1/4W F	R600	1-249-429-11	CARBON	10K 5% 1/4W
R529	1-249-393-11	CARBON	10 5% 1/4W F	R601	1-249-437-11	CARBON	47K 5% 1/4W
R530	1-249-393-11	CARBON	10 5% 1/4W F	R602	1-215-453-00	METAL	22K 1% 1/4W
R531	1-249-425-11	CARBON	4.7K 5% 1/4W	R604	1-215-455-00	METAL	27K 1% 1/4W
R532	1-247-887-00	CARBON	220K 5% 1/4W	R605	1-216-370-11	METAL OXIDE	1.2 5% 2W F
R533	1-215-878-00	METAL OXIDE	33K 5% 1W F	R606	1-215-913-11	METAL OXIDE	220 5% 3W F
R534	1-249-437-11	CARBON	47K 5% 1/4W	R607	1-249-383-11	CARBON	1.5 5% 1/4W F
R535	1-215-473-00	METAL	150K 1% 1/4W	R610	1-249-432-11	CARBON	18K 5% 1/4W
R536	1-215-445-00	METAL	10K 1% 1/4W	R611	1-249-432-11	CARBON	18K 5% 1/4W
R537	1-215-463-00	METAL	56K 1% 1/4W	R612	1-249-425-11	CARBON	4.7K 5% 1/4W
R538	1-215-449-00	METAL	15K 1% 1/4W	R613	1-249-437-11	CARBON	47K 5% 1/4W
R539	1-249-425-11	CARBON	4.7K 5% 1/4W	R614	1-249-421-11	CARBON	2.2K 5% 1/4W
R542	1-249-434-11	CARBON	27K 5% 1/4W	R615	1-249-409-11	CARBON	220 5% 1/4W
R545	1-247-889-00	CARBON	270K 5% 1/4W	R620	1-249-424-11	CARBON	3.9K 5% 1/4W
R546	1-249-441-11	CARBON	100K 5% 1/4W	R621	1-249-424-11	CARBON	3.9K 5% 1/4W
R547	1-249-441-11	CARBON	100K 5% 1/4W	R622	1-249-410-11	CARBON	270 5% 1/4W
R548	1-215-449-00	METAL	15K 1% 1/4W	R623	1-249-425-11	CARBON	4.7K 5% 1/4W
R549	1-249-441-11	CARBON	100K 5% 1/4W	R624	1-249-425-11	CARBON	4.7K 5% 1/4W
R550	1-215-441-00	METAL	6.8K 1% 1/4W	R625	1-249-410-11	CARBON	270 5% 1/4W
R551	1-215-457-00	METAL	33K 1% 1/4W	R626	1-249-433-11	CARBON	22K 5% 1/4W
R552	1-215-465-00	METAL	68K 1% 1/4W	R627	1-249-433-11	CARBON	22K 5% 1/4W
R553	1-247-903-00	CARBON	1M 5% 1/4W	R628	1-249-441-11	CARBON	100K 5% 1/4W
R554	1-249-419-11	CARBON	1.5K 5% 1/4W	R629	1-247-883-00	CARBON	150K 5% 1/4W
R555	1-249-438-11	CARBON	56K 5% 1/4W	R630	1-249-398-11	CARBON	27 5% 1/4W F
R556	1-249-423-11	CARBON	3.3K 5% 1/4W	R631	1-249-441-11	CARBON	100K 5% 1/4W
R557	1-249-435-11	CARBON	33K 5% 1/4W	R632	1-249-385-11	CARBON	2.2 5% 1/4W F
R558	1-249-433-11	CARBON	22K 5% 1/4W	R633	1-249-385-11	CARBON	2.2 5% 1/4W F
R559	1-249-417-11	CARBON	1K 5% 1/4W	R634	1-215-888-00	METAL OXIDE	220 5% 2W F
R560	1-249-429-11	CARBON	10K 5% 1/4W	R635	1-215-444-00	METAL	9.1K 1% 1/4W
R561	1-249-437-11	CARBON	47K 5% 1/4W	R636	1-215-425-00	METAL	1.5K 1% 1/4W
R562	1-249-437-11	CARBON	47K 5% 1/4W	R637	1-249-429-11	CARBON	10K 5% 1/4W
R563	1-249-441-11	CARBON	100K 5% 1/4W	R638	1-249-417-11	CARBON	1K 5% 1/4W
R564	1-249-415-11	CARBON	680 5% 1/4W	R650	1-216-382-11	METAL OXIDE	0.27 5% 3W F
R565	1-215-450-00	METAL	16K 1% 1/4W	R651	1-249-417-11	CARBON	1K 5% 1/4W F
R566	1-249-410-11	CARBON	270 5% 1/4W	R652	1-249-405-11	CARBON	100 5% 1/4W F
R567	1-249-402-11	CARBON	56 5% 1/4W	R670	1-249-409-11	CARBON	220 5% 1/4W
R568	1-249-411-11	CARBON	330 5% 1/4W	R671	1-249-429-11	CARBON	10K 5% 1/4W
R569	1-249-441-11	CARBON	100K 5% 1/4W	R680	1-249-426-11	CARBON	5.6K 5% 1/4W
R570	1-249-441-11	CARBON	100K 5% 1/4W	R682	1-249-409-11	CARBON	220 5% 1/4W F
R571	1-249-441-11	CARBON	100K 5% 1/4W	R683	1-249-429-11	CARBON	10K 5% 1/4W
R572	1-216-439-00	METAL OXIDE	12K 5% 1W F	R684	1-249-425-11	CARBON	4.7K 5% 1/4W
R573	1-216-459-00	METAL OXIDE	2.7K 5% 2W F	R685	1-249-425-11	CARBON	4.7K 5% 1/4W
R574	1-216-459-00	METAL OXIDE	2.7K 5% 2W F	R686	1-249-423-11	CARBON	3.3K 5% 1/4W
R575	1-202-826-00	SOLID	4.7K 20% 1/2W	R687	1-247-807-31	CARBON	100 5% 1/4W
R576	1-259-882-11	CARBON	3.3M 5% 1/4W	R688	1-216-455-11	METAL OXIDE	560 5% 2W F
R577	1-249-443-11	CARBON	0.47 5% 1/4W F	R689	1-215-471-00	METAL	120K 1% 1/4W
R578	1-249-443-11	CARBON	0.47 5% 1/4W F	R801	1-249-409-11	CARBON	220 5% 1/4W
R580	1-249-496-11	CARBON	100K 5% 1/2W	R802	1-249-409-11	CARBON	220 5% 1/4W
R581 $\Delta$	1-249-417-11	CARBON	1K 5% 1/4W	R804	1-247-891-00	CARBON	330K 5% 1/4W
R582	1-249-417-11	CARBON	1K 5% 1/4W	R808	1-215-463-00	METAL	56K 1% 1/4W
R583 $\Delta$	1-249-425-11	CARBON	4.7K 5% 1/4W	R809	1-249-423-11	CARBON	3.3K 5% 1/4W
R584	1-249-425-11	CARBON	4.7K 5% 1/4W	R810	1-249-413-11	CARBON	470 5% 1/4W
R585	1-249-425-11	CARBON	4.7K 5% 1/4W	R811	1-249-434-11	CARBON	27K 5% 1/4W
R586	1-247-903-00	CARBON	1M 5% 1/4W	R812	1-249-438-11	CARBON	56K 5% 1/4W
R587	1-249-440-11	CARBON	82K 5% 1/4W	R813	1-249-417-11	CARBON	1K 5% 1/4W
R588	1-215-869-11	METAL OXIDE	1K 5% 1W F	R814	1-249-429-11	CARBON	10K 5% 1/4W
				R815	1-249-427-11	CARBON	6.8K 5% 1/4W
				R816	1-249-425-11	CARBON	4.7K 5% 1/4W

• The components identified by  $\Delta$  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R817	1-249-422-11	CARBON	2.7K 5% 1/4W	R938	1-247-807-31	CARBON	100 5% 1/4W
R818	1-249-417-11	CARBON	1K 5% 1/4W	R939	1-249-405-11	CARBON	100 5% 1/4W F
R820	1-249-417-11	CARBON	1K 5% 1/4W	R940	1-249-405-11	CARBON	100 5% 1/4W F
R821	1-216-379-11	METAL OXIDE	6.8 5% 2W F	R941	1-247-807-31	CARBON	100 5% 1/4W
R822	1-249-423-11	CARBON	3.3K 5% 1/4W	R944	1-249-432-11	CARBON	18K 5% 1/4W
R824	1-249-419-11	CARBON	1.5K 5% 1/4W F	R945	1-247-895-00	CARBON	470K 5% 1/4W
R825	1-215-857-11	METAL OXIDE	10 5% 1W F	R946	1-249-425-11	CARBON	4.7K 5% 1/4W
R826	1-249-404-00	CARBON	82 5% 1/4W	R947	1-249-419-11	CARBON	1.5K 5% 1/4W F
R827	1-216-438-11	METAL OXIDE	8.2K 5% 1W F	R948	1-249-435-11	CARBON	33K 5% 1/4W
R828	1-249-441-11	CARBON	100K 5% 1/4W	R950	1-249-425-11	CARBON	4.7K 5% 1/4W
R829	1-249-414-11	CARBON	560 5% 1/4W	R952	1-247-807-31	CARBON	100 5% 1/4W
R830	1-249-411-11	CARBON	330 5% 1/4W	R953	1-247-889-00	CARBON	270K 5% 1/4W
R831	1-249-426-11	CARBON	5.6K 5% 1/4W	R954	1-247-889-00	CARBON	270K 5% 1/4W
R832	1-215-864-00	METAL OXIDE	150 5% 1W F	R956	1-249-433-11	CARBON	22K 5% 1/4W
R833	1-249-421-11	CARBON	2.2K 5% 1/4W	R1601	1-215-461-00	METAL	47K 1% 1/4W
R834	1-249-433-11	CARBON	22K 5% 1/4W	R1602	1-249-429-11	CARBON	10K 5% 1/4W
R835	1-249-393-11	CARBON	10 5% 1/4W	R1603	1-215-451-00	METAL	18K 1% 1/4W
R836	1-249-435-11	CARBON	33K 5% 1/4W	R1604	1-215-445-00	METAL	10K 1% 1/4W
R837	1-249-435-11	CARBON	33K 5% 1/4W	R1605	1-215-421-00	METAL	1K 1% 1/4W
R838	1-215-857-11	METAL OXIDE	10 5% 1W F	R1606	1-249-423-11	CARBON	3.3K 5% 1/4W
R839	1-249-410-11	CARBON	270 5% 1/4W	R1607	1-249-436-11	CARBON	39K 5% 1/4W
R840	1-249-429-11	CARBON	10K 5% 1/4W	R1608	1-215-445-00	METAL	10K 1% 1/4W
R841	1-249-437-11	CARBON	47K 5% 1/4W	R1609	1-215-445-00	METAL	10K 1% 1/4W
R842	1-249-429-11	CARBON	10K 5% 1/4W	R1610	1-249-423-11	CARBON	3.3K 5% 1/4W
R843	1-249-421-11	CARBON	2.2K 5% 1/4W	R1611	1-249-421-11	CARBON	2.2K 5% 1/4W
R844	1-249-421-11	CARBON	2.2K 5% 1/4W	R1612	1-215-467-00	METAL	82K 1% 1/4W
R845	1-249-417-11	CARBON	1K 5% 1/4W	R1613	1-215-469-00	METAL	100K 1% 1/4W
R901	1-249-425-11	CARBON	4.7K 5% 1/4W	R1614	1-249-430-11	CARBON	12K 5% 1/4W
R902	1-249-438-11	CARBON	56K 5% 1/4W	R1615	1-249-431-11	CARBON	15K 5% 1/4W
R903	1-249-429-11	CARBON	10K 5% 1/4W	R1616	1-247-807-31	CARBON	100 5% 1/4W
R904	1-249-429-11	CARBON	10K 5% 1/4W	R1617	1-249-431-11	CARBON	15K 5% 1/4W
R905	1-249-429-11	CARBON	10K 5% 1/4W	R1618	1-249-429-11	CARBON	10K 5% 1/4W
R906	1-249-425-11	CARBON	4.7K 5% 1/4W	R1619	1-249-437-11	CARBON	47K 5% 1/4W
R907	1-249-429-11	CARBON	10K 5% 1/4W	R1622	1-249-428-11	CARBON	8.2K 5% 1/4W
R908	1-249-434-11	CARBON	27K 5% 1/4W	R1623	1-249-427-11	CARBON	6.8K 5% 1/4W
R909	1-215-465-00	METAL	68K 1% 1/4W	R1624	1-249-429-11	CARBON	10K 5% 1/4W
R910	1-215-457-00	METAL	33K 1% 1/4W	R1625	1-249-433-11	CARBON	22K 5% 1/4W
R911	1-249-441-11	CARBON	100K 5% 1/4W	R1626	1-249-440-11	CARBON	82K 5% 1/4W
R912	1-249-429-11	CARBON	10K 5% 1/4W	R1631	1-249-425-11	CARBON	4.7K 5% 1/4W
R913	1-249-425-11	CARBON	4.7K 5% 1/4W	R1635	1-215-437-00	METAL	4.7K 1% 1/4W
R914	1-249-401-11	CARBON	47 5% 1/4W	R1636	1-247-887-00	CARBON	220K 5% 1/4W
R915	1-249-425-11	CARBON	4.7K 5% 1/4W	R1637	1-215-439-00	METAL	5.6K 1% 1/4W
R916	1-249-421-11	CARBON	2.2K 5% 1/4W	R1638	1-215-439-00	METAL	5.6K 1% 1/4W
R917	1-249-439-11	CARBON	68K 5% 1/4W	R1639	1-249-434-11	CARBON	27K 5% 1/4W
R918	1-249-413-11	CARBON	470 5% 1/4W	R1640	1-215-433-00	METAL	3.3K 1% 1/4W
R919	1-249-437-11	CARBON	47K 5% 1/4W	R1641	1-215-437-00	METAL	4.7K 1% 1/4W
R920	1-249-418-11	CARBON	1.2K 5% 1/4W F	R1642	1-249-426-11	CARBON	5.6K 5% 1/4W
R921	1-215-876-00	METAL OXIDE	15K 5% 1W F	R1643	1-215-455-00	METAL	27K 1% 1/4W
R922	1-215-870-11	METAL OXIDE	1.5K 5% 1W	R1660	1-215-424-00	METAL	1.3K 1% 1/4W
R923	1-249-429-11	CARBON	10K 5% 1/4W	R1661	1-215-451-00	METAL	18K 1% 1/4W
R924	1-249-423-11	CARBON	3.3K 5% 1/4W	R1662	1-249-441-11	CARBON	100K 5% 1/4W
R925	1-249-415-11	CARBON	680 5% 1/4W	R1663	1-249-428-11	CARBON	8.2K 5% 1/4W
R926	1-249-409-11	CARBON	220 5% 1/4W	R1664	1-249-425-11	CARBON	4.7K 5% 1/4W
R927	1-249-429-11	CARBON	10K 5% 1/4W	R1665	1-249-425-11	CARBON	4.7K 5% 1/4W
R928	1-249-421-11	CARBON	2.2K 5% 1/4W	R1666	1-249-429-11	CARBON	10K 5% 1/4W
R929	1-249-429-11	CARBON	10K 5% 1/4W	R1667	1-247-807-31	CARBON	100 5% 1/4W
R930	1-249-434-11	CARBON	27K 5% 1/4W	R1668	1-249-429-11	CARBON	10K 5% 1/4W
R931	1-249-421-11	CARBON	2.2K 5% 1/4W	R1669	1-249-437-11	CARBON	47K 5% 1/4W
R933	1-249-421-11	CARBON	2.2K 5% 1/4W	R1670	1-249-429-11	CARBON	10K 5% 1/4W
R934	1-249-439-11	CARBON	68K 5% 1/4W	R1671	1-249-429-11	CARBON	10K 5% 1/4W
R935	1-249-429-11	CARBON	10K 5% 1/4W	R1672	1-249-433-11	CARBON	22K 5% 1/4W
R936	1-249-429-11	CARBON	10K 5% 1/4W	R1673	1-215-445-00	METAL	10K 1% 1/4W
R937	1-249-421-11	CARBON	2.2K 5% 1/4W	R1674	1-249-421-11	CARBON	2.2K 5% 1/4W

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Les composants identifiés par  
une trame et une marque  $\Delta$   
sont critiques pour la sécurité.  
Ne les remplacer que par une  
pièce portant le numéro spécifié.

The components identified by  
shading and mark  $\Delta$  are critical  
for safety.  
Replace only with part number  
specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
R1675	1-249-429-11	CARBON 10K 5% 1/4W	
R1676	1-215-426-00	METAL 1.6K 1% 1/4W	
R1677	1-215-445-00	METAL 10K 1% 1/4W	
R1678	1-215-465-00	METAL 68K 1% 1/4W	
R1680	1-249-417-11	CARBON 1K 5% 1/4W	
R1681	1-249-422-11	CARBON 2.7K 5% 1/4W	
R1682	1-249-441-11	CARBON 100K 5% 1/4W	
R1683	1-215-449-00	METAL 15K 1% 1/4W	
R1684	1-249-423-11	CARBON 3.3K 5% 1/4W	
R1685	1-215-428-00	METAL 2K 1% 1/4W	
R1686	1-215-451-00	METAL 18K 1% 1/4W	
R1687	1-215-451-00	METAL 18K 1% 1/4W	
R1688	1-215-442-00	METAL 7.5K 1% 1/4W	
R1690	1-249-431-11	CARBON 15K 5% 1/4W	
R1699	1-215-449-00	METAL 15K 1% 1/4W	
R1832	1-215-890-11	METAL OXIDE 470 5% 2W F	
R1833	1-249-389-11	CARBON 4.7 5% 1/4W F	
R1834	1-215-883-11	METAL OXIDE 33 5% 2W F	
	1-216-361-00	METAL OXIDE 0.22 5% 2W F	(PVM-2950Q/2950QM(AEP)) (PVM-2950QM(AUS))
R1835	1-215-889-00	METAL OXIDE 330 5% 2W F	(PVM-2950Q/2950QM(AEP))
	1-216-886-11	METAL OXIDE 100 5% 2W F	(PVM-2950QM(AUS))
R1836	1-215-887-00	METAL OXIDE 150 5% 2W F	(PVM-2950Q/2950QM(AEP))
	1-215-889-00	METAL OXIDE 330 5% 2W F	(PVM-2950QM(AUS))
R1837	1-215-909-11	METAL OXIDE 47 5% 3W F	
<VARIABLE RESISTOR>			
RV1601	1-228-996-00	RES. ADJ. METAL GLAZE 47K	
RV1602	1-228-993-00	RES. ADJ. METAL GLAZE 4.7K	
RV1603	1-228-994-00	RES. ADJ. METAL GLAZE 10K	
<SPARK GAP>			
SG501	1-519-422-11	GAP, SPARK	
<TRANSFORMER>			
T501	1-437-217-11	TRANSFORMER, HORIZONTAL DRIVE	
T502	$\Delta$ 1-460-199-11	TRANSFORMER (HLT)	
T503	1-424-584-11	TRANSFORMER, DYNAMIC FOCUS	
T504	$\Delta$ X-4032-250-1	TRANSFORMER ASSY, FLYBACK	
T1801	1-423-622-11	TRANSFORMER, FERRITE (VPOT)	
<THERMISTOR>			
TH501	1-807-925-11	THERMISTOR	
*****			
*A-1301-950-A	M BOARD, COMPLETE		
*****			
*1-526-950-11	SOCKET, IC 64P		
<CAPACITOR>			
C801	1-126-933-11	ELECT 100MF 20% 10V	
C802	1-163-035-00	CERAMIC CHIP 0.047MF 50V	
C803	1-163-097-00	CERAMIC CHIP 15PF 5% 50V	
C804	1-163-097-00	CERAMIC CHIP 15PF 5% 50V	

REF.NO.	PART NO.	DESCRIPTION	REMARK
C805	1-137-399-11	FILM 0.1MF 5% 50V	
C806	1-163-035-00	CERAMIC CHIP 0.047MF 50V	
C807	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C808	1-163-035-00	CERAMIC CHIP 0.047MF 50V	
C809	1-163-035-00	CERAMIC CHIP 0.047MF 50V	
C810	1-126-933-11	ELECT 100MF 20% 10V	
C811	1-163-035-00	CERAMIC CHIP 0.047MF 50V	
C812	1-163-035-00	CERAMIC CHIP 0.047MF 50V	
C814	1-163-239-11	CERAMIC CHIP 33PF 5% 50V	
C815	1-163-239-11	CERAMIC CHIP 33PF 5% 50V	
C816	1-124-925-11	ELECT 2.2MF 20% 50V	
C817	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
<CONNECTOR>			
CN801	1-573-965-21	PIN, CONNECTOR (PC BOARD) 50P	
CN802	*1-564-520-11	PLUG, CONNECTOR 5P	
CN803	1-564-523-11	PLUG, CONNECTOR 8P	
<DIODE>			
D801	8-719-404-46	DIODE MA110	
D802	8-719-404-46	DIODE MA110	
D803	8-719-404-46	DIODE MA110	
D804	8-719-404-46	DIODE MA110	
D805	8-719-404-46	DIODE MA110	
D806	8-719-404-46	DIODE MA110	
D807	8-719-404-46	DIODE MA110	
D808	8-719-404-46	DIODE MA110	
D809	8-719-404-46	DIODE MA110	
D810	8-719-404-46	DIODE MA110	
D811	8-719-404-46	DIODE MA110	
D812	8-719-404-46	DIODE MA110	
D813	8-719-404-46	DIODE MA110	
D814	8-719-404-46	DIODE MA110	
<IC>			
IC801	8-759-261-31	IC HD6473256P10-PVM1	
IC802	8-759-925-74	IC SN74HC04ANS	
IC803	8-759-083-63	IC UPD6453GT-625-E1	
IC804	8-759-162-80	IC MM1170BFB	
IC805	8-759-032-26	IC MC74HC125AF	
IC806	8-759-156-54	IC X25040SI	
<COIL>			
L801	1-408-421-00	INDUCTOR 100UH	
L802	1-408-421-00	INDUCTOR 100UH	
L803	1-410-476-11	INDUCTOR 33UH	
<RESISTOR>			
R801	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R802	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R805	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R806	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R807	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R808	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R809	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R810	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R811	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R812	1-216-049-00	METAL GLAZE 1K 5% 1/10W	

M	DX
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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R813	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C1511	1-163-011-11	CERAMIC CHIP 0.0015MF	10% 50V
R814	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C1512	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R815	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C1513	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
R816	1-216-025-00	METAL GLAZE 100 5%	1/10W	C1515	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R817	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C1517	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R818	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C1518	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R819	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C1519	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
R821	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C1520	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
R822	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C1521	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
R823	1-216-025-00	METAL GLAZE 100 5%	1/10W	C1522	1-136-171-00	FILM 0.33MF	5% 50V
R824	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C1523	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
R825	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C1524	1-163-011-11	CERAMIC CHIP 0.0015MF	10% 50V
R826	1-216-033-00	METAL GLAZE 220 5%	1/10W	C1525	1-163-011-11	CERAMIC CHIP 0.0015MF	10% 50V
R827	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C1526	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R828	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C1528	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R829	1-216-033-00	METAL GLAZE 220 5%	1/10W	C1529	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R830	1-216-033-00	METAL GLAZE 220 5%	1/10W	C1534	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R831	1-216-089-91	METAL GLAZE 47K 5%	1/10W	C1537	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R832	1-216-089-91	METAL GLAZE 47K 5%	1/10W	C1538	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R833	1-216-089-91	METAL GLAZE 47K 5%	1/10W	C1539	1-104-665-11	ELECT 100MF	20% 25V
R834	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C1540	1-104-665-11	ELECT 100MF	20% 25V
R835	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C1541	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R836	1-216-073-00	METAL GLAZE 10K 5%	1/10W	C1542	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R837	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C1543	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R838	1-216-025-00	METAL GLAZE 100 5%	1/10W	C1545	1-124-927-11	ELECT 4.7MF	20% 50V
R839	1-216-025-00	METAL GLAZE 100 5%	1/10W	C1550	1-136-177-00	FILM 1MF	5% 50V
R840	1-216-025-00	METAL GLAZE 100 5%	1/10W	C1551	1-126-157-11	ELECT 10MF	20% 16V
R841	1-216-025-00	METAL GLAZE 100 5%	1/10W	C1552	1-136-159-00	FILM 0.033MF	5% 50V
R842	1-216-073-00	METAL GLAZE 10K 5%	1/10W	C1590	1-162-638-11	CERAMIC CHIP 1MF	16V
R843	1-216-073-00	METAL GLAZE 10K 5%	1/10W	C1591	1-162-638-11	CERAMIC CHIP 1MF	16V
R844	1-216-033-00	METAL GLAZE 220 5%	1/10W	C1592	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R845	1-216-033-00	METAL GLAZE 220 5%	1/10W	<CONNECTOR>			
R846	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W	CN1501	1-573-965-21	PIN, CONNECTOR (PC BOARD) 50P	
R848	1-216-025-00	METAL GLAZE 100 5%	1/10W	<DIODE>			
R849	1-216-033-00	METAL GLAZE 220 5%	1/10W	D1501	8-719-404-46	DIODE MA110	
R850	1-216-033-00	METAL GLAZE 220 5%	1/10W	D1502	8-719-037-03	DIODE RD6.8SB1-T1	
R851	1-216-033-00	METAL GLAZE 220 5%	1/10W	D1505	8-719-404-46	DIODE MA110	
R852	1-216-025-00	METAL GLAZE 100 5%	1/10W	D1506	8-719-404-46	DIODE MA110	
R853	1-216-049-00	METAL GLAZE 1K 5%	1/10W	D1507	8-719-404-46	DIODE MA110	
R854	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W	D1508	8-719-404-46	DIODE MA110	
R855	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W	D1590	8-719-033-52	DIODE RD5.1SB1-T1	
R856	1-216-073-00	METAL GLAZE 10K 5%	1/10W	D1591	8-719-404-46	DIODE MA110	
<CRYSTAL>				<IC>			
X801	1-760-040-11	VIBRATOR, CRYSTAL		IC1501	8-752-347-92	IC CXD2018Q	
*****				IC1502	8-752-347-92	IC CXD2018Q	
*A-1341-764-A DX BOARD, COMPLETE				IC1503	8-759-970-89	IC BA10358F	
*****				IC1504	8-759-970-89	IC BA10358F	
<CAPACITOR>				IC1505	8-759-970-89	IC BA10358F	
C1501	1-163-031-11	CERAMIC CHIP 0.01MF	50V	IC1506	8-752-058-68	IC CXA1315M	
C1502	1-163-031-11	CERAMIC CHIP 0.01MF	50V	IC1507	8-759-032-16	IC MC74HC08AF-T2	
C1503	1-163-031-11	CERAMIC CHIP 0.01MF	50V	IC1508	8-759-032-16	IC MC74HC08AF-T2	
C1504	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	IC1509	8-759-925-80	IC SN74HC14ANS	
C1505	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	IC1511	8-759-032-20	IC MC74HC32AF	
C1506	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	IC1514	8-759-236-47	IC TC74HC164AF(EL)	
C1507	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	IC1516	8-759-236-47	IC TC74HC164AF(EL)	
C1508	1-136-171-00	FILM 0.33MF	5% 50V	IC1518	8-759-970-89	IC BA10358F	
C1509	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	IC1590	8-759-970-89	IC BA10358F	
C1510	1-163-011-11	CERAMIC CHIP 0.0015MF	10% 50V				

**DX** **G1** **G (PVM-2950Q)**

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
<COIL>			
L1501	1-408-409-00	INDUCTOR 10UH	
L1502	1-408-409-00	INDUCTOR 10UH	
L1503	1-408-409-00	INDUCTOR 10UH	
L1504	1-408-409-00	INDUCTOR 10UH	
<TRANSISTOR>			
Q1501	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1502	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1503	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1504	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1590	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1591	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
<RESISTOR>			
R1501	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R1502	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R1503	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1504	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1505	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1506	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R1507	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R1508	1-216-109-00	METAL GLAZE 330K 5% 1/10W	
R1509	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1510	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1512	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1513	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1514	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R1515	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
R1517	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1518	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1519	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R1520	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R1521	1-216-109-00	METAL GLAZE 330K 5% 1/10W	
R1522	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1523	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1524	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1525	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R1526	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1527	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1528	1-216-083-00	METAL GLAZE 27K 5% 1/10W	
R1529	1-216-047-00	METAL GLAZE 820 5% 1/10W	
R1530	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
R1532	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R1533	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1534	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1535	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R1536	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1539	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1541	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1542	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1547	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R1548	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R1549	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1550	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R1551	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R1552	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1553	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1554	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R1560	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	

REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	R1561	1-216-113-00	METAL GLAZE 470K 5%	1/10W
	R1562	1-216-097-00	METAL GLAZE 100K 5%	1/10W
	R1570	1-216-095-00	METAL GLAZE 82K 5%	1/10W
	R1571	1-216-073-00	METAL GLAZE 10K 5%	1/10W
	R1572	1-216-073-00	METAL GLAZE 10K 5%	1/10W
	R1573	1-216-073-00	METAL GLAZE 10K 5%	1/10W
	R1574	1-216-073-00	METAL GLAZE 10K 5%	1/10W
	R1575	1-216-089-91	METAL GLAZE 47K 5%	1/10W
	R1576	1-216-073-00	METAL GLAZE 10K 5%	1/10W
	R1577	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
	R1578	1-216-097-00	METAL GLAZE 100K 5%	1/10W
	R1579	1-216-073-00	METAL GLAZE 10K 5%	1/10W
	R1590	1-216-105-00	METAL GLAZE 220K 5%	1/10W
	R1591	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
	R1592	1-216-668-11	METAL CHIP 5.1K 0.50%	1/10W
	R1593	1-216-668-11	METAL CHIP 5.1K 0.50%	1/10W
	R1594	1-216-073-00	METAL GLAZE 10K 5%	1/10W
	R1595	1-216-073-00	METAL GLAZE 10K 5%	1/10W
	R1596	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
	R1597	1-216-073-00	METAL GLAZE 10K 5%	1/10W
	R1598	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
*****				
	*A-1311-363-A	G1 BOARD, COMPLETE (PVM-2950Q)		
		*****		
	*A-1311-365-A	G1 BOARD, COMPLETE (PVM-2950QM)		
		*****		
	<CAPACITOR>			
	C601	$\Delta$ 1-162-599-12	CERAMIC 0.0047MF	20% 400V
	<CONNECTOR>			
	CN602	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
	CN603	*1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P	
	CN604	*1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P	
	CN610	*1-691-134-11	PIN, CONNECTOR (PC BOARD) 2P	
	CN611	*1-537-711-11	TAB, FASTEN (PCB)	
	<THERMISTOR>			
	THP601A	$\Delta$ 1-809-539-11	THERMISTOR, POSITIVE (PVM-2950Q)	
		$\Delta$ 1-809-827-11	THERMISTOR, POSITIVE (PVM-2950QM)	
*****				
	*A-1316-181-A	G BOARD, COMPLETE (PVM-2950Q)		
		*****		
	1-533-223-11	CLIP, FUSE		
	4-382-854-11	SCREW (M3X10), P, SW (+)		
	<CAPACITOR>			
	C602	$\Delta$ 1-104-706-11	FILM 0.22MF	20% 250V
	C603	$\Delta$ 1-104-706-11	FILM 0.22MF	20% 250V
	C604	$\Delta$ 1-162-599-12	CERAMIC 0.0047MF	20% 400V
	C605	$\Delta$ 1-162-599-12	CERAMIC 0.0047MF	20% 400V
	C606	1-104-346-11	ELECT 1000MF	200V
	C610	1-136-067-00	FILM 0.0036MF	3% 2KV
	C611	1-106-357-00	MYLAR 0.0039MF	10% 100V
	C612	1-124-927-11	ELECT 4.7MF	20% 50V
	C613	1-126-948-11	ELECT 100MF	20% 35V
	C615	$\Delta$ 1-162-599-12	CERAMIC 0.0047MF	20% 400V

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

PVM-2950Q/2950QM  
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G (PVM-2950Q)

REF. NO.	PART NO.	DESCRIPTION	REMARK
C616	$\Delta$ 1-162-599-12	CERAMIC 0.0047MF 20% 400V	
C617	1-102-116-00	CERAMIC 680PF 10% 50V	
C620	1-161-754-00	CERAMIC 0.001MF 10% 2KV	
C621	1-125-494-11	ELECT (BLOCK) 560MF 20% 160V	
C622	1-126-933-11	ELECT 100MF 20% 10V	
C625	1-162-318-11	CERAMIC 0.001MF 10% 500V	
C626	1-126-943-11	ELECT 2200MF 20% 25V	
C627	1-162-318-11	CERAMIC 0.001MF 10% 500V	
C628	1-126-943-11	ELECT 2200MF 20% 25V	
C629	1-162-318-11	CERAMIC 0.001MF 10% 500V	
C630	1-126-953-11	ELECT 2200MF 20% 35V	
C640	1-126-972-31	ELECT 1000MF 20% 50V	
C642	1-126-967-11	ELECT 47MF 20% 50V	
C643	1-126-964-11	ELECT 10MF 20% 50V	
C644	1-126-964-11	ELECT 10MF 20% 50V	
C645	1-126-933-11	ELECT 100MF 20% 10V	
C646	1-126-964-11	ELECT 10MF 20% 50V	
C647	1-126-933-11	ELECT 100MF 20% 16V	
C660	$\Delta$ 1-161-742-00	CERAMIC 0.0022MF 20% 400V	
C661	$\Delta$ 1-161-742-00	CERAMIC 0.0022MF 20% 400V	

<CONNECTOR>

CN601	*1-580-843-11	PIN, CONNECTOR (POWER)
CN605	*1-564-508-11	PLUG, CONNECTOR 5P
CN606	*1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P
CN607	*1-564-507-11	PLUG, CONNECTOR 4P
CN609	*1-691-134-11	PIN, CONNECTOR (PC BOARD) 2P

<DIODE>

D601	8-719-022-99	DIODE D6S860L
D604	8-719-979-58	DIODE EGP10D
D605	8-719-911-19	DIODE 1SS119
D607	8-719-979-58	DIODE EGP10D
D620	8-719-029-04	DIODE D5L60
D621	8-719-920-67	DIODE ERC91-02
D622	8-719-045-48	DIODE FML-G12S
D623	8-719-920-67	DIODE ERC91-02
D625	8-719-911-19	DIODE 1SS119
D640	8-719-511-40	DIODE S1VB40
D641	8-719-911-19	DIODE 1SS119
D643	8-719-911-19	DIODE 1SS119
D645	8-719-110-36	DIODE RD13ESB2
D646	8-719-911-19	DIODE 1SS119
D647	8-719-109-89	DIODE RD5.6ESB2
D648	8-719-911-19	DIODE 1SS119

<FUSE>

F601	$\Delta$ 1-532-748-11	FUSE, GLASS TUBE (6.3A/125V)
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<FERRITE BEAD>

FB601	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH
FB602	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB603	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB605	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB606	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB607	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB608	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB609	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB620	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH

REF. NO.	PART NO.	DESCRIPTION	REMARK
FB621	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB622	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB623	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	

<IC>

IC601	8-749-010-03	IC STR-M6515A
IC620	8-749-920-61	IC SE-135N
IC641	8-759-701-56	IC NJM78M05FA

<COIL>

L620	1-406-663-21	COIL, CHOKE 47UH
L621	1-412-533-21	INDUCTOR 47UH
L622	1-412-533-21	INDUCTOR 47UH
L623	1-412-527-11	INDUCTOR 15UH
L624	1-412-527-11	INDUCTOR 15UH

<PHOTO COUPLER>

PH602	$\Delta$ 8-749-923-50	PHOTO COUPLER PC111YS
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<IC LINK>

PS620	$\Delta$ 1-532-686-21	LINK, IC 2.7A
PS622	$\Delta$ 1-532-686-21	LINK, IC 2.7A

<TRANSISTOR>

Q601	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q620	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q621	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q641	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q642	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q643	8-729-140-96	TRANSISTOR 2SD774-34
Q644	8-729-140-97	TRANSISTOR 2SB734-34
Q645	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q646	8-729-119-78	TRANSISTOR 2SC2785-HFE

<RESISTOR>

R601	$\Delta$ 1-202-719-00	SOLID 1M 20% 1/2W
R602	1-202-981-11	WIREWOUND 0.82 5% 20W
R603	1-215-928-71	METAL OXIDE 68K 5% 3W F
R605	1-216-381-11	METAL OXIDE 0.22 5% 3W F
R606	1-216-381-11	METAL OXIDE 0.22 5% 3W F
R607	1-249-415-11	CARBON 680 5% 1/4W
R608	1-249-418-11	CARBON 1.2K 5% 1/4W
R610	1-249-424-11	CARBON 3.9K 5% 1/4W F
R611	1-249-424-11	CARBON 3.9K 5% 1/4W F
R613	1-249-417-11	CARBON 1K 5% 1/4W
R614	1-249-388-11	CARBON 3.9 5% 1/4W F
R615	1-249-417-11	CARBON 1K 5% 1/4W
R619	1-249-421-11	CARBON 2.2K 5% 1/4W
R620	$\Delta$ 1-218-265-11	METAL 8.2M 5% 1W
R627	1-249-377-11	CARBON 0.47 5% 1/4W F
R628	1-249-377-11	CARBON 0.47 5% 1/4W F
R629	1-249-377-11	CARBON 0.47 5% 1/4W F
R630	1-249-437-11	CARBON 47K 5% 1/4W
R631	1-215-472-00	METAL 130K 1% 1/4W
R632	1-216-386-11	METAL OXIDE 0.56 5% 3W F
R633	1-216-386-11	METAL OXIDE 0.56 5% 3W F
R634	1-215-445-00	METAL 10K 1% 1/4W
R636	1-216-482-11	METAL OXIDE 1.8K 5% 3W F
R637	1-216-357-00	METAL OXIDE 4.7 5% 1W F

**PVM-2950Q/2950QM**  
RM-854

**G (PVM-2950Q)**

**G (PVM-2950QM)**

Les composants identifiés par  
une trame et une marque  $\Delta$   
sont critiques pour la sécurité.  
Ne les remplacer que par une  
pièce portant le numéro spécifié.

The components identified by  
shading and mark  $\Delta$  are critical  
for safety.  
Replace only with part number  
specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
R638	1-249-438-11	CARBON 56K 5% 1/4W	
R642	1-216-422-11	METAL OXIDE 18 5% 1W	F
R643	1-249-424-11	CARBON 3.9K 5% 1/4W	
R644	1-249-429-11	CARBON 10K 5% 1/4W	
R645	1-249-433-11	CARBON 22K 5% 1/4W	
R646	1-249-424-11	CARBON 3.9K 5% 1/4W	
R647	1-249-429-11	CARBON 10K 5% 1/4W	
R648	1-249-417-11	CARBON 1K 5% 1/4W	
R649	1-247-895-00	CARBON 470K 5% 1/4W	
R650	1-249-438-11	CARBON 56K 5% 1/4W	
R651	1-249-431-11	CARBON 15K 5% 1/4W	
R652	1-249-425-11	CARBON 4.7K 5% 1/4W	
R653	1-249-437-11	CARBON 47K 5% 1/4W	
R654	1-249-429-11	CARBON 10K 5% 1/4W	
R655	1-249-424-11	CARBON 3.9K 5% 1/4W	
R656	1-249-431-11	CARBON 15K 5% 1/4W	
R660	$\Delta$ 1-247-903-00	CARBON 1M 5% 1/4W	

<RELAY>

RY601	$\Delta$ 1-515-738-11	RELAY
RY602	$\Delta$ 1-515-738-11	RELAY

<TRANSFORMER>

T601	$\Delta$ 1-424-248-11	TRANSFORMER, LINE FILTER
T602	$\Delta$ 1-424-248-11	TRANSFORMER, LINE FILTER
T603	$\Delta$ 1-426-946-11	TRANSFORMER, POWER
T604	$\Delta$ 1-426-943-11	TRANSFORMER, CONVERTER (SRT)

<VARISTOR>

VDR601	$\Delta$ 1-809-786-11	VARISTOR
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\*A-1316-182-A G BOARD, COMPLETE (PVM-2950QM)  
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1-533-223-11 CLIP, FUSE  
4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

C602	$\Delta$ 1-104-706-11	FILM 0.22MF 20% 250V
C603	$\Delta$ 1-104-706-11	FILM 0.22MF 20% 250V
C604	$\Delta$ 1-162-599-12	CERAMIC 0.0047MF 20% 400V
C605	$\Delta$ 1-162-599-12	CERAMIC 0.0047MF 20% 400V
C607	1-137-485-11	FILM 0.68MF 10% 630V
C608	1-137-485-11	FILM 0.68MF 10% 630V
C609	1-136-206-11	FILM 0.033MF 10% 630V
C610	1-136-539-11	FILM 0.0022MF 3% 2KV
C611	1-106-357-00	MYLAR 0.0039MF 10% 100V
C612	1-124-927-11	ELECT 4.7MF 20% 50V
C613	1-126-949-11	ELECT 220MF 20% 35V
C614	1-126-233-11	ELECT 22MF 20% 50V
C615	$\Delta$ 1-162-599-12	CERAMIC 0.0047MF 20% 400V
C616	$\Delta$ 1-162-599-12	CERAMIC 0.0047MF 20% 400V
C618	1-162-115-00	CERAMIC 330PF 10% 2KV
C620	1-161-754-00	CERAMIC 0.001MF 10% 2KV
C621	1-125-473-11	ELECT (BLOCK) 1000MF 20% 160V
C622	1-126-933-11	ELECT 100MF 20% 10V
C623	1-130-783-00	MYLAR 0.33MF 10% 100V
C624	1-107-637-11	ELECT 22MF 20% 160V
C625	1-162-318-11	CERAMIC 0.001MF 10% 500V

REF.NO.	PART NO.	DESCRIPTION	REMARK
C626	1-104-868-11	ELECT 2200MF 20% 25V	
C627	1-162-318-11	CERAMIC 0.001MF 10% 500V	
C628	1-104-868-11	ELECT 2200MF 20% 25V	
C629	1-162-318-11	CERAMIC 0.001MF 10% 500V	
C630	1-104-877-11	ELECT 2200MF 20% 35V	
C640	1-126-952-11	ELECT 1000MF 20% 35V	
C642	1-126-967-11	ELECT 47MF 20% 50V	
C643	1-126-964-11	ELECT 10MF 20% 50V	
C644	1-126-964-11	ELECT 10MF 20% 50V	
C645	1-126-933-11	ELECT 100MF 20% 10V	
C646	1-126-964-11	ELECT 10MF 20% 50V	
C647	1-126-933-11	ELECT 100MF 20% 16V	
C660	$\Delta$ 1-161-742-00	CERAMIC 0.0022MF 20% 400V	
C661	$\Delta$ 1-161-742-00	CERAMIC 0.0022MF 20% 400V	

<CONNECTOR>

CN601	*1-580-843-11	PIN, CONNECTOR (POWER)
CN605	*1-564-508-11	PLUG, CONNECTOR 5P
CN606	*1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P
CN607	*1-564-507-11	PLUG, CONNECTOR 4P
CN609	*1-691-134-11	PIN, CONNECTOR (PC BOARD) 2P

<DIODE>

D601	8-719-510-53	DIODE D4SB60L
D603	8-719-311-31	DIODE RU-1P
D604	8-719-979-58	DIODE EGP10D
D605	8-719-911-19	DIODE ISS119
D607	8-719-979-58	DIODE EGP10D
D620	8-719-029-04	DIODE D5L60
D621	8-719-045-48	DIODE FML-G12S
D622	8-719-045-48	DIODE FML-G12S
D623	8-719-920-67	DIODE ERC91-02
D625	8-719-911-19	DIODE ISS119
D640	8-719-511-40	DIODE S1VB40
D641	8-719-911-19	DIODE ISS119
D643	8-719-911-19	DIODE ISS119
D645	8-719-110-36	DIODE RD13ESB2
D646	8-719-911-19	DIODE ISS119

<FUSE>

F601	$\Delta$ 1-576-232-21	FUSE (H.B.C.) (5.0A/250V)
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<FERRITE BEAD>

FB601	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH
FB602	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB603	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB605	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB606	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB607	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB608	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB609	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB620	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB621	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB622	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB623	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH

<IC>

IC601	8-749-925-03	IC STR-M6524
IC620	8-749-010-02	IC STR-S3135

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

PVM-2950Q/2950QM  
RM-854


G (PVM-2950QM)

C

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC641	8-759-701-56	IC NJM78M05FA	
<COIL>			
L601	1-459-946-11	COIL, NOISE FILTER	
L620	1-406-663-21	COIL, CHOKE 47UH	
L621	1-412-533-21	INDUCTOR 47UH	
L622	1-412-533-21	INDUCTOR 47UH	
L623	1-412-527-11	INDUCTOR 15UH	
L624	1-412-527-11	INDUCTOR 15UH	
<PHOTO COUPLER>			
PH602	8-749-923-50	PHOTO COUPLER PC111YS	
<IC LINK>			
PS620	1-532-686-21	LINK, IC 2.7A	
PS622	1-532-686-21	LINK, IC 2.7A	
<TRANSISTOR>			
Q601	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q602	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q620	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q621	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q641	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q642	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q643	8-729-140-96	TRANSISTOR 2SD774-34	
<RESISTOR>			
R601	1-202-719-00	SOLID 1M 20% 1/2W	
R602	1-215-929-11	METAL OXIDE 100K 5% 3W F	
R603	1-216-492-11	METAL OXIDE 82K 5% 3W F	
R604	1-215-929-11	METAL OXIDE 100K 5% 3W F	
R605	1-216-382-11	METAL OXIDE 0.27 5% 3W F	
R606	1-216-383-11	METAL OXIDE 0.33 5% 3W F	
R607	1-249-415-11	CARBON 680 5% 1/4W	
R608	1-249-418-11	CARBON 1.2K 5% 1/4W	
R609	1-249-437-11	CARBON 47K 5% 1/4W F	
R610	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R611	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R613	1-249-417-11	CARBON 1K 5% 1/4W	
R614	1-249-385-11	CARBON 2.2 5% 1/4W F	
R615	1-249-417-11	CARBON 1K 5% 1/4W	
R616	1-249-417-11	CARBON 1K 5% 1/4W	
R617	1-247-811-31	CARBON 150 5% 1/4W	
R618	1-249-419-11	CARBON 1.5K 5% 1/4W	
R619	1-249-421-11	CARBON 2.2K 5% 1/4W	
R627	1-249-377-11	CARBON 0.47 5% 1/4W F	
R628	1-249-377-11	CARBON 0.47 5% 1/4W F	
R629	1-249-377-11	CARBON 0.47 5% 1/4W F	
R630	1-249-437-11	CARBON 47K 5% 1/4W	
R631	1-215-472-00	METAL 130K 1% 1/4W	
R632	1-216-386-11	METAL OXIDE 0.56 5% 3W F	
R633	1-216-386-11	METAL OXIDE 0.56 5% 3W F	
R634	1-215-445-00	METAL 10K 1% 1/4W	
R636	1-216-482-11	METAL OXIDE 1.8K 5% 3W F	
R637	1-216-357-00	METAL OXIDE 4.7 5% 1W F	
R638	1-249-433-11	CARBON 22K 5% 1/4W	
R639	1-259-884-11	CARBON 4.7M 5% 1/4W	
R642	1-216-422-11	METAL OXIDE 18 5% 1W F	

REF.NO.	PART NO.	DESCRIPTION	REMARK
R643	1-249-424-11	CARBON 3.9K 5% 1/4W	
R644	1-249-429-11	CARBON 10K 5% 1/4W	
R645	1-249-433-11	CARBON 22K 5% 1/4W	
R646	1-249-424-11	CARBON 3.9K 5% 1/4W	
R647	1-249-429-11	CARBON 10K 5% 1/4W	
R648	1-249-417-11	CARBON 1K 5% 1/4W	
R649	1-247-895-00	CARBON 470K 5% 1/4W	
R650	1-259-881-11	CARBON 2.7M 5% 1/4W	
R660	1-247-903-00	CARBON 1M 5% 1/4W	
R661	1-216-492-11	METAL OXIDE 82K 5% 3W F	
<RELAY>			
RY601	1-515-738-11	RELAY	
RY602	1-515-738-11	RELAY	
<TRANSFORMER>			
T601	1-426-716-11	TRANSFORMER, LINE FILTER (LFT)	
T602	1-426-716-11	TRANSFORMER, LINE FILTER (LFT)	
T603	1-426-945-11	TRANSFORMER, POWER	
T604	1-426-947-11	TRANSFORMER, CONVERTER (SRT)	
<VARISTOR>			
VDR601	1-810-271-21	VARISTOR ZNR-14DK471U	
*****			
*A-1331-344-A C BOARD, COMPLETE			
*****			
4-382-854-11 SCREW (M3X10), P, SW (+)			
<CAPACITOR>			
C701	1-102-212-00	CERAMIC 820PF 10% 500V	
C702	1-102-116-00	CERAMIC 680PF 10% 50V	
C703	1-102-074-00	CERAMIC 0.001MF 10% 50V	
C704	1-126-964-11	ELECT 10MF 20% 50V	
C705	1-101-004-00	CERAMIC 0.01MF 50V	
C706	1-130-495-00	MYLAR 0.1MF 5% 50V	
C707	1-130-495-00	MYLAR 0.1MF 5% 50V	
C709	1-129-720-00	FILM 0.033MF 10% 400V	
C711	1-136-601-11	FILM 0.01MF 10% 630V	
C713	1-162-116-00	CERAMIC 680PF 10% 2KV	
C714	1-107-654-11	ELECT 33MF 20% 250V	
C715	1-102-074-00	CERAMIC 0.001MF 10% 50V	
C716	1-102-074-00	CERAMIC 0.001MF 10% 50V	
C717	1-102-074-00	CERAMIC 0.001MF 10% 50V	
C719	1-107-651-11	ELECT 4.7MF 20% 250V	
C771	1-102-121-00	CERAMIC 0.0022MF 10% 50V	
C781	1-126-964-11	ELECT 10MF 20% 50V	
C782	1-101-004-00	CERAMIC 0.01MF 50V	
C790	1-102-973-00	CERAMIC 100PF 5% 50V	
C791	1-101-004-00	CERAMIC 0.01MF 50V	
<CONNECTOR>			
CN702	*1-564-512-11	PLUG, CONNECTOR 9P	
CN703	*1-573-964-11	PIN, CONNECTOR (PC BOARD) 6P	
<DIODE>			
D704	8-719-911-19	DIODE 1SS119	

V

The components identified by shading and mark  are critical for safety.  
Replace only with part number specified.

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REF.NO.	PART NO.	DESCRIPTION	REMARK
C978	1-130-471-00	MYLAR 0.001MF	5% 50V
C979	1-130-471-00	MYLAR 0.001MF	5% 50V
C980	1-126-964-11	ELECT 10MF	20% 50V

<CONNECTOR>

CN901 \*1-564-512-11 PLUG, CONNECTOR 9P

<DIODE>

D961	8-719-911-19	DIODE 1SS119	
D963	8-719-911-19	DIODE 1SS119	
D964	8-719-911-19	DIODE 1SS119	
D965	8-719-911-19	DIODE 1SS119	
D966	8-719-911-19	DIODE 1SS119	
D967	8-719-110-88	DIODE RD39ESB2	
D968	8-719-110-88	DIODE RD39ESB2	

<COIL>

L962 1-408-416-00 INDUCTOR 39UH

<TRANSISTOR>

Q961	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q962	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q963	8-729-809-26	TRANSISTOR 2SA1606-E	
Q964	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q965	8-729-809-29	TRANSISTOR 2SC4159-E	
Q966	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q967	8-729-142-86	TRANSISTOR 2SC3733	
Q968	8-729-119-78	TRANSISTOR 2SC2785-HFE	

<RESISTOR>

R951	1-249-434-11	CARBON 27K	5% 1/4W
R952	1-249-423-11	CARBON 3.3K	5% 1/4W
R953	1-249-423-11	CARBON 3.3K	5% 1/4W
R954	1-247-903-00	CARBON 1M	5% 1/4W
R955	1-249-421-11	CARBON 2.2K	5% 1/4W
R962	1-249-409-11	CARBON 220	5% 1/4W
R963	1-249-419-11	CARBON 1.5K	5% 1/4W
R964	1-260-311-11	CARBON 39	5% 1/2W
R965	1-249-414-11	CARBON 560	5% 1/4W F
R966	1-249-418-11	CARBON 1.2K	5% 1/4W
R968	1-249-418-11	CARBON 1.2K	5% 1/4W
R969	1-249-384-11	CARBON 1.8	5% 1/4W F
R970	1-249-435-11	CARBON 33K	5% 1/4W
R972	1-249-432-11	CARBON 18K	5% 1/4W
R974	1-216-476-11	METAL OXIDE 180	5% 3W F
R975	1-249-417-11	CARBON 1K	5% 1/4W F
R976	1-249-432-11	CARBON 18K	5% 1/4W
R977	1-249-438-11	CARBON 56K	5% 1/4W
R978	1-249-430-11	CARBON 12K	5% 1/4W
R979	1-249-414-11	CARBON 560	5% 1/4W
R980	1-249-420-11	CARBON 1.8K	5% 1/4W
R981	1-249-415-11	CARBON 680	5% 1/4W
R982	1-249-384-11	CARBON 1.8	5% 1/4W F
R983	1-249-441-11	CARBON 100K	5% 1/4W
R984	1-247-807-31	CARBON 100	5% 1/4W
R985	1-249-400-11	CARBON 39	5% 1/4W F
R986	1-249-435-11	CARBON 33K	5% 1/4W
R987	1-249-428-11	CARBON 8.2K	5% 1/4W
R988	1-249-415-11	CARBON 680	5% 1/4W

REF.NO.	PART NO.	DESCRIPTION	REMARK
R989	1-249-413-11	CARBON 470	5% 1/4W
R990	1-216-475-11	METAL OXIDE 120	5% 3W F
R991	1-249-409-11	CARBON 220	5% 1/4W

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\*A-1347-093-A VC BOARD, COMPLETE  
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<CAPACITOR>

C1801	1-124-126-00	ELECT 47MF	20% 16V
C1803	1-124-126-00	ELECT 47MF	20% 16V
C1804	1-124-126-00	ELECT 47MF	20% 16V
C1805	1-136-157-00	FILM 0.022MF	5% 50V
C1808	1-130-471-00	MYLAR 0.001MF	5% 50V
C1809	1-130-471-00	MYLAR 0.001MF	5% 50V
C1810	1-136-171-00	FILM 0.33MF	5% 50V
C1811	1-136-171-00	FILM 0.33MF	5% 50V
C1812	1-126-320-11	ELECT 10MF	20% 16V
C1817	1-104-665-11	ELECT 100MF	20% 25V
C1820	1-107-710-11	ELECT 100MF	20% 35V
C1850	1-136-153-00	FILM 0.01MF	5% 50V

<CONNECTOR>

CN801 1-573-300-11 CONNECTOR, BOARD TO BOARD 18P  
CN1850 1-564-517-11 PLUG, CONNECTOR 2P

<DIODE>

D1801	8-719-109-93	DIODE RD6.2ESB2	
D1802	8-719-109-93	DIODE RD6.2ESB2	
D1806	8-719-911-19	DIODE 1SS119	
D1817	8-719-987-87	DIODE ERA85-009	
D1818	8-719-987-87	DIODE ERA85-009	
D1822	8-719-109-93	DIODE RD6.2ESB2	
D1823	8-719-109-93	DIODE RD6.2ESB2	
D1824	8-719-987-87	DIODE ERA85-009	
D1850	8-719-911-19	DIODE 1SS119	

<IC>

IC1801	8-759-231-53	IC TA7805S	
IC1802	8-759-135-80	IC UPC358C	
IC1803	8-759-902-21	IC SN74LS221N	
IC1850	8-759-603-37	IC M5216P	

<TRANSISTOR>

Q1801	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1802	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1803	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1804	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1805	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1806	8-729-385-82	TRANSISTOR 2SB858-C	
Q1807	8-729-809-26	TRANSISTOR 2SA1606-E	
Q1808	8-729-809-29	TRANSISTOR 2SC4159-E	
Q1809	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1810	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1811	8-729-208-71	TRANSISTOR 2SC3298B-0	
Q1850	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1851	8-729-119-78	TRANSISTOR 2SC2785-HFE	

VC H3

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
<RESISTOR>				D874	8-719-404-46	DIODE MA110	
R1801	1-215-866-11	METAL OXIDE 330 5%	1W F	D875	8-719-404-46	DIODE MA110	
R1802	1-247-887-00	CARBON 220K 5%	1/4W	D876	8-719-404-46	DIODE MA110	
R1803	1-215-467-00	METAL 82K 1%	1/4W				
R1806	1-217-477-00	FUSIBLE 4.7 5%	1W F				
R1808	1-247-887-00	CARBON 220K 5%	1/4W	<IC>			
R1811	1-249-429-11	CARBON 10K 5%	1/4W	IC871	8-759-165-26	IC SC402130B	
R1812	1-249-417-11	CARBON 1K 5%	1/4W	<COIL>			
R1813	1-215-473-00	METAL 150K 1%	1/4W	L871	1-408-421-00	INDUCTOR 100UH	
R1814	1-249-429-11	CARBON 10K 5%	1/4W	L872	1-408-429-00	INDUCTOR 470UH	
R1818	1-213-070-00	FUSIBLE 27 5%	1W F	<TRANSISTOR>			
R1819	1-215-913-11	METAL OXIDE 220 5%	3W F	Q871	8-729-901-01	TRANSISTOR DTC144EK	
R1820	1-216-451-11	METAL OXIDE 120 5%	2W F	Q872	8-729-901-98	TRANSISTOR 2SA1036K-R	
R1822	1-249-409-11	CARBON 220 5%	1/4W F	Q873	8-729-901-98	TRANSISTOR 2SA1036K-R	
R1823	1-249-401-11	CARBON 47 5%	1/4W F	Q874	8-729-901-01	TRANSISTOR DTC144EK	
R1825	1-215-455-00	METAL 27K 1%	1/4W	Q875	8-729-901-01	TRANSISTOR DTC144EK	
R1828	1-215-866-11	METAL OXIDE 330 5%	1W F	Q876	8-729-901-01	TRANSISTOR DTC144EK	
R1829	1-213-070-00	FUSIBLE 27 5%	1W F	Q877	8-729-901-01	TRANSISTOR DTC144EK	
R1830	1-217-477-00	FUSIBLE 4.7 5%	1W F	Q878	8-729-901-04	TRANSISTOR DTA114EK	
R1831	1-216-429-00	METAL OXIDE 270 5%	1W F	<RESISTOR>			
R1846	1-249-429-11	CARBON 10K 5%	1/4W	JR871	1-216-295-91	METAL GLAZE 0 5%	1/10W
R1850	1-249-417-11	CARBON 1K 5%	1/4W	JR872	1-216-295-91	METAL GLAZE 0 5%	1/10W
R1851	1-215-451-00	METAL 18K 1%	1/4W	JR873	1-216-295-91	METAL GLAZE 0 5%	1/10W
R1852	1-215-455-00	METAL 27K 1%	1/4W	JR874	1-216-296-91	METAL GLAZE 0 5%	1/8W
R1853	1-215-452-00	METAL 20K 1%	1/4W	JR875	1-216-295-91	METAL GLAZE 0 5%	1/10W
R1854	1-215-447-00	METAL 12K 1%	1/4W	R871	1-216-294-00	METAL GLAZE 10M 5%	1/8W
R1855	1-215-445-00	METAL 10K 1%	1/4W	R872	1-216-089-91	METAL GLAZE 47K 5%	1/10W
R1856	1-215-427-00	METAL 1.8K 1%	1/4W	R873	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R1857	1-249-422-11	CARBON 2.7K 5%	1/4W	R874	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R1858	1-249-429-11	CARBON 10K 5%	1/4W	R875	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R1859	1-249-422-11	CARBON 2.7K 5%	1/4W	R876	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R1860	1-249-429-11	CARBON 10K 5%	1/4W	R877	1-216-097-00	METAL GLAZE 100K 5%	1/10W
<VARIABLE RESISTOR>				R878	1-216-009-00	METAL GLAZE 22 5%	1/10W
RV1801	1-241-766-11	RES, ADJ, CERMET 47K		R879	1-216-005-00	METAL GLAZE 15 5%	1/10W
*****				R880	1-216-009-00	METAL GLAZE 22 5%	1/10W
*A-1372-005-A H3 BOARD, COMPLETE				R881	1-216-009-00	METAL GLAZE 22 5%	1/10W
*****				R882	1-216-009-00	METAL GLAZE 22 5%	1/10W
<CAPACITOR>				R883	1-216-009-00	METAL GLAZE 22 5%	1/10W
C871	1-126-924-11	ELECT 330MF 20%	10V	R884	1-216-089-91	METAL GLAZE 47K 5%	1/10W
C872	1-163-035-00	CERAMIC CHIP 0.047MF	50V	R885	1-216-073-00	METAL GLAZE 10K 5%	1/10W
C873	1-126-952-11	ELECT 1000MF 20%	16V	R886	1-216-073-00	METAL GLAZE 10K 5%	1/10W
C874	1-163-009-11	CERAMIC CHIP 0.001MF	10V	R887	1-216-089-91	METAL GLAZE 47K 5%	1/10W
C875	1-163-037-11	CERAMIC CHIP 0.022MF	10V 25V	R888	1-216-073-00	METAL GLAZE 10K 5%	1/10W
<CONNECTOR>				<CRYSTAL>			
CN871	*1-564-506-11	PLUG, CONNECTOR 3P		X871	1-577-082-11	VIBRATOR, CERAMIC	
CN872	1-564-511-11	PLUG, CONNECTOR 8P		*****			
CN873	*1-564-513-11	PLUG, CONNECTOR 10P					
CN874	*1-564-509-11	PLUG, CONNECTOR 6P					
CN875	1-564-505-11	PLUG, CONNECTOR 2P					
CN877	*1-573-299-11	CONNECTOR, BOARD TO BOARD 10P					
<DIODE>							
D871	8-719-404-46	DIODE MA110					
D872	8-719-404-46	DIODE MA110					
D873	8-719-404-46	DIODE MA110					

UA	UJ
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REF.NO.	PART NO.	DESCRIPTION	REMARK
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\*A-1373-467-A UA BOARD, COMPLETE  
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## &lt;CAPACITOR&gt;

C171	1-126-933-11	ELECT	100MF	20%	10V
C172	1-126-964-11	ELECT	10MF	20%	50V
C173	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C174	1-126-964-11	ELECT	10MF	20%	50V
C175	1-126-096-11	ELECT	10MF	20%	25V

C176	1-126-096-11	ELECT	10MF	20%	25V
C177	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C178	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V

## &lt;CONNECTOR&gt;

CN171	1-691-803-11	SOCKET, DIN			
CN172	*1-564-520-11	PLUG, CONNECTOR 5P			
CN173	*1-564-518-11	PLUG, CONNECTOR 3P			
CN175	*1-564-520-11	PLUG, CONNECTOR 5P			

## &lt;DIODE&gt;

D171	8-719-110-17	DIODE RD10ESB2			
D172	8-719-110-17	DIODE RD10ESB2			
D173	8-719-911-19	DIODE 1SS119			
D174	8-719-404-46	DIODE MA110			
D175	8-719-404-46	DIODE MA110			

D176	8-719-404-46	DIODE MA110			
D177	8-719-404-46	DIODE MA110			

## &lt;IC&gt;

IC171	8-759-065-85	IC MAX232N			
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## &lt;JACK&gt;

J171	1-563-760-11	JACK, MINIATURE (DIA. 3.5)			
J172	1-563-760-11	JACK, MINIATURE (DIA. 3.5)			

## &lt;COIL&gt;

L171	1-422-613-11	COIL, AIR CORE			
L172	1-422-613-11	COIL, AIR CORE			
L173	1-422-613-11	COIL, AIR CORE			
L174	1-422-613-11	COIL, AIR CORE			
L175	1-422-613-11	COIL, AIR CORE			

L176	1-422-613-11	COIL, AIR CORE			
L177	1-422-613-11	COIL, AIR CORE			
L178	1-422-613-11	COIL, AIR CORE			

## &lt;TRANSISTOR&gt;

Q171	8-729-901-01	TRANSISTOR DTC144EK			
Q172	8-729-901-06	TRANSISTOR DTA144EK			

## &lt;RESISTOR&gt;

R171	1-216-025-00	METAL GLAZE	100	5%	1/10W
R172	1-216-025-00	METAL GLAZE	100	5%	1/10W
R173	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R174	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R175	1-216-049-00	METAL GLAZE	1K	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION	REMARK
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R176	1-216-025-00	METAL GLAZE	100 5% 1/10W
R177	1-216-049-00	METAL GLAZE	1K 5% 1/10W

## &lt;TAB&gt;

TB171	1-537-187-11	TERMINAL, PUSH (4P)	
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\*A-1373-468-A UJ BOARD, COMPLETE  
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## &lt;CAPACITOR&gt;

C101	1-124-589-11	ELECT	47MF	20%	16V
C102	1-124-589-11	ELECT	47MF	20%	16V
C103	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C104	1-126-157-11	ELECT	10MF	20%	16V
C105	1-126-157-11	ELECT	10MF	20%	16V

C106	1-124-589-11	ELECT	47MF	20%	16V
C107	1-124-589-11	ELECT	47MF	20%	16V
C108	1-126-157-11	ELECT	10MF	20%	16V
C109	1-126-157-11	ELECT	10MF	20%	16V
C110	1-124-589-11	ELECT	47MF	20%	16V

C111	1-124-589-11	ELECT	47MF	20%	16V
C112	1-124-589-11	ELECT	47MF	20%	16V
C113	1-126-157-11	ELECT	10MF	20%	16V
C114	1-126-157-11	ELECT	10MF	20%	16V
C115	1-124-767-00	ELECT	2.2MF	20%	50V

C116	1-124-767-00	ELECT	2.2MF	20%	50V
C117	1-124-589-11	ELECT	47MF	20%	16V
C118	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C119	1-163-035-00	CERAMIC CHIP	0.047MF		50V
C120	1-163-123-00	CERAMIC CHIP	180PF	5%	50V

## &lt;CONNECTOR&gt;

CN101	*1-566-641-11	CONNECTOR, HINGE (TAB) 18P	
CN102	*1-566-641-11	CONNECTOR, HINGE (TAB) 18P	
CN103	1-564-517-11	PLUG, CONNECTOR 2P	

## &lt;DIODE&gt;

D101	8-719-110-17	DIODE RD10ESB2	
D102	8-719-110-17	DIODE RD10ESB2	
D103	8-719-110-17	DIODE RD10ESB2	
D104	8-719-110-17	DIODE RD10ESB2	
D105	8-719-110-17	DIODE RD10ESB2	

D106	8-719-110-17	DIODE RD10ESB2	
D107	8-719-110-17	DIODE RD10ESB2	
D108	8-719-110-17	DIODE RD10ESB2	
D109	8-719-110-17	DIODE RD10ESB2	
D110	8-719-110-17	DIODE RD10ESB2	

D111	8-719-110-17	DIODE RD10ESB2	
D112	8-719-110-17	DIODE RD10ESB2	
D113	8-719-110-17	DIODE RD10ESB2	
D114	8-719-110-17	DIODE RD10ESB2	
D115	8-719-109-89	DIODE RD5.6ESB2	

D116	8-719-109-89	DIODE RD5.6ESB2	
D117	8-719-110-17	DIODE RD10ESB2	

## &lt;JACK&gt;

J101	1-573-969-11	JACK BLOCK, PIN	
J102	1-573-969-11	JACK BLOCK, PIN	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
J103	1-573-969-11	JACK BLOCK, PIN					
J104	1-573-969-11	JACK BLOCK, PIN					
J105	1-573-969-11	JACK BLOCK, PIN					
J106	1-537-764-11	TERMINAL BOARD ASSY, 1/0					
J108	1-537-764-11	TERMINAL BOARD ASSY, 1/0					
J110	1-537-765-11	TERMINAL BOARD ASSY, 1/0					
<TRANSISTOR>							
Q101	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q102	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q103	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q104	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q105	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
<RESISTOR>							
R101	1-215-394-00	METAL 75 1% 1/4W					
R102	1-215-394-00	METAL 75 1% 1/4W					
R103	1-215-394-00	METAL 75 1% 1/4W					
R104	1-216-099-00	METAL GLAZE 120K 5% 1/10W					
R105	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W					
R106	1-216-099-00	METAL GLAZE 120K 5% 1/10W					
R107	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W					
R108	1-215-394-00	METAL 75 1% 1/4W					
R109	1-215-394-00	METAL 75 1% 1/4W					
R110	1-215-394-00	METAL 75 1% 1/4W					
R111	1-216-099-00	METAL GLAZE 120K 5% 1/10W					
R112	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W					
R113	1-216-099-00	METAL GLAZE 120K 5% 1/10W					
R114	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W					
R115	1-216-073-00	METAL GLAZE 10K 5% 1/10W					
R116	1-216-079-00	METAL GLAZE 18K 5% 1/10W					
R117	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W					
R118	1-215-394-00	METAL 75 1% 1/4W					
R119	1-215-394-00	METAL 75 1% 1/4W					
R120	1-216-073-00	METAL GLAZE 10K 5% 1/10W					
R121	1-216-079-00	METAL GLAZE 18K 5% 1/10W					
R122	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W					
R123	1-215-394-00	METAL 75 1% 1/4W					
R124	1-216-073-00	METAL GLAZE 10K 5% 1/10W					
R125	1-216-079-00	METAL GLAZE 18K 5% 1/10W					
R126	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W					
R127	1-216-099-00	METAL GLAZE 120K 5% 1/10W					
R128	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W					
R129	1-216-099-00	METAL GLAZE 120K 5% 1/10W					
R130	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W					
R131	1-216-099-00	METAL GLAZE 120K 5% 1/10W					
R132	1-216-689-11	METAL GLAZE 39K 5% 1/10W					
R133	1-215-394-00	METAL 75 1% 1/4W					
R134	1-216-099-00	METAL GLAZE 120K 5% 1/10W					
R135	1-216-689-11	METAL GLAZE 39K 5% 1/10W					
R136	1-215-394-00	METAL 75 1% 1/4W					
R137	1-216-013-00	METAL GLAZE 33 5% 1/10W					
R138	1-216-013-00	METAL GLAZE 33 5% 1/10W					
R139	1-216-013-00	METAL GLAZE 33 5% 1/10W					
R140	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W					
R141	1-216-039-00	METAL GLAZE 390 5% 1/10W					
R142	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W					
R143	1-216-039-00	METAL GLAZE 390 5% 1/10W					
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				*A-1394-545-A	UT BOARD, COMPLETE		
					*****		
					<CAPACITOR>		
				C201	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C202	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C203	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C204	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C205	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C206	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C207	1-163-035-00	CERAMIC CHIP 0.047MF	50V
				C208	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C209	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C210	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C211	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C212	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C213	1-163-035-00	CERAMIC CHIP 0.047MF	50V
				C214	1-137-368-11	FILM 0.0047MF	5% 50V
				C215	1-136-165-00	FILM 0.1MF	5% 50V
				C216	1-137-368-11	FILM 0.0047MF	5% 50V
				C217	1-136-165-00	FILM 0.1MF	5% 50V
				C218	1-137-374-11	FILM 0.047MF	5% 50V
				C219	1-163-035-00	CERAMIC CHIP 0.047MF	50V
				C220	1-163-035-00	CERAMIC CHIP 0.047MF	50V
				C221	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
				C223	1-163-035-00	CERAMIC CHIP 0.047MF	50V
				C224	1-163-035-00	CERAMIC CHIP 0.047MF	50V
				C225	1-163-035-00	CERAMIC CHIP 0.047MF	50V
				C226	1-163-241-11	CERAMIC CHIP 39PF	5% 50V
				C227	1-126-940-11	ELECT 330MF	20% 16V
				C228	1-124-126-00	ELECT 47MF	20% 16V
				C229	1-126-964-11	ELECT 10MF	20% 50V
				C230	1-126-964-11	ELECT 10MF	20% 50V
				C231	1-126-964-11	ELECT 10MF	20% 50V
				C232	1-126-934-11	ELECT 220MF	20% 16V
				C233	1-126-964-11	ELECT 10MF	20% 50V
				C234	1-126-964-11	ELECT 10MF	20% 50V
				C235	1-124-126-00	ELECT 47MF	20% 16V
				C236	1-124-903-11	ELECT 1MF	20% 50V
				C237	1-124-903-11	ELECT 1MF	20% 50V
				C238	1-126-933-11	ELECT 100MF	20% 16V
				C239	1-124-126-00	ELECT 47MF	20% 16V
				C240	1-124-126-00	ELECT 47MF	20% 16V
				C242	1-126-964-11	ELECT 10MF	20% 50V
				C243	1-126-935-11	ELECT 470MF	20% 6.3V
				C244	1-126-964-11	ELECT 10MF	20% 50V
				C245	1-126-923-11	ELECT 220MF	20% 10V
				C246	1-124-126-00	ELECT 47MF	20% 16V
				C247	1-126-964-11	ELECT 10MF	20% 50V
				C248	1-124-903-11	ELECT 1MF	20% 50V
				C249	1-126-964-11	ELECT 10MF	20% 50V
				C250	1-126-964-11	ELECT 10MF	20% 50V
				C251	1-126-964-11	ELECT 10MF	20% 50V
				C252	1-163-035-00	CERAMIC CHIP 0.047MF	50V
				C253	1-124-126-00	ELECT 47MF	20% 16V
				C254	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C255	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C256	1-136-171-00	FILM 0.33MF	5% 50V
				C257	1-124-925-11	ELECT 2.2MF	20% 50V
				C258	1-163-249-11	CERAMIC CHIP 82PF	5% 50V
				C259	1-137-364-11	FILM 0.001MF	5% 50V
				C260	1-163-121-00	CERAMIC CHIP 150PF	5% 50V

UT

REF.NO.	PART NO.	DESCRIPTION	REMARK
C261	1-163-035-00	CERAMIC CHIP 0.047MF	50V
C262	1-124-126-00	ELECT 47MF	20% 16V
C263	1-163-243-11	CERAMIC CHIP 47PF	5% 50V
C270	1-124-903-11	ELECT 1MF	20% 50V
C271	1-124-927-11	ELECT 4.7MF	20% 50V
C272	1-124-903-11	ELECT 1MF	20% 50V
C273	1-124-126-00	ELECT 47MF	20% 16V
C274	1-163-035-00	CERAMIC CHIP 0.047MF	50V
C275	1-124-126-00	ELECT 47MF	20% 16V
C276	1-136-167-00	FILM 0.15MF	5% 50V
C277	1-136-157-00	FILM 0.022MF	5% 50V
C278	1-124-925-11	ELECT 2.2MF	20% 50V
C279	1-163-249-11	CERAMIC CHIP 82PF	5% 50V
C280	1-137-364-11	FILM 0.001MF	5% 50V
C281	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C282	1-124-126-00	ELECT 47MF	20% 16V
C283	1-163-035-00	CERAMIC CHIP 0.047MF	50V
C290	1-124-927-11	ELECT 4.7MF	20% 50V

<CONNECTOR>

CN201	*1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)
CN202	*1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)
CN203	*1-564-506-11	PLUG, CONNECTOR 3P
CN204	1-573-300-11	CONNECTOR, BOARD TO BOARD 18P
CN205	1-573-300-11	CONNECTOR, BOARD TO BOARD 18P
CN206	1-564-505-11	PLUG, CONNECTOR 2P

<DIODE>

D202	8-719-911-19	DIODE 1SS119
D203	8-719-911-19	DIODE 1SS119
D205	8-719-911-19	DIODE 1SS119
D206	8-719-109-68	DIODE RD3.6ESB1

<FILTER>

FL201	1-239-550-11	FILTER, LOW PASS
FL202	1-239-550-11	FILTER, LOW PASS
FL203	1-239-550-11	FILTER, LOW PASS

<IC>

IC201	8-752-067-28	IC CXA1545AS
IC202	8-741-765-01	IC SBX1765-01
IC203	8-759-800-81	IC LA7016
IC204	8-759-245-75	IC TA8184P
IC205	8-752-058-68	IC CXA1315M
IC206	8-759-009-82	IC MC14011BF-T2
IC207	8-759-800-81	IC LA7016
IC208	8-759-009-82	IC MC14011BF-T2

<COIL>

L201	1-408-421-00	INDUCTOR 100UH
L202	1-408-421-00	INDUCTOR 100UH
L203	1-408-421-00	INDUCTOR 100UH
L204	1-408-414-00	INDUCTOR 27UH
L205	1-408-414-00	INDUCTOR 27UH

<TRANSISTOR>

Q201	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q202	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q203	8-729-120-28	TRANSISTOR 2SC1623-L5L6

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q204	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q205	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q206	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q207	8-729-216-22	TRANSISTOR 2SA1162-G	
Q208	8-729-216-22	TRANSISTOR 2SA1162-G	
Q211	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q212	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q213	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q214	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q215	8-729-216-22	TRANSISTOR 2SA1162-G	
Q216	8-729-901-01	TRANSISTOR DTC144EK	
Q217	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q218	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q219	8-729-216-22	TRANSISTOR 2SA1162-G	
Q220	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q221	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q222	8-729-901-01	TRANSISTOR DTC144EK	
Q223	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q224	8-729-216-22	TRANSISTOR 2SA1162-G	
Q225	8-729-216-22	TRANSISTOR 2SA1162-G	
Q226	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q227	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q228	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q229	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q230	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q231	8-729-216-22	TRANSISTOR 2SA1162-G	
Q232	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

<RESISTOR>

JR1	1-216-295-91	METAL GLAZE	0	5%	1/10W
JR2	1-216-295-91	METAL GLAZE	0	5%	1/10W
JR4	1-216-295-91	METAL GLAZE	0	5%	1/10W
R201	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R202	1-216-025-00	METAL GLAZE	100	5%	1/10W
R203	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R204	1-216-025-00	METAL GLAZE	100	5%	1/10W
R205	1-216-033-00	METAL GLAZE	220	5%	1/10W
R206	1-216-033-00	METAL GLAZE	220	5%	1/10W
R207	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R208	1-216-033-00	METAL GLAZE	220	5%	1/10W
R209	1-216-033-00	METAL GLAZE	220	5%	1/10W
R210	1-216-033-00	METAL GLAZE	220	5%	1/10W
R211	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R212	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R213	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R214	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R215	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R217	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R218	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R219	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R220	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R221	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R222	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R223	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R224	1-216-033-00	METAL GLAZE	220	5%	1/10W
R225	1-216-033-00	METAL GLAZE	220	5%	1/10W
R226	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R227	1-216-035-00	METAL GLAZE	270	5%	1/10W
R228	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R229	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R230	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R232	1-216-295-91	METAL GLAZE	0	5%	1/10W
R233	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W

UT H

REF.NO.	PART NO.	DESCRIPTION	REMARK
R234	1-216-025-00	METAL GLAZE	100 5% 1/10W
R235	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R236	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R237	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R238	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R239	1-216-043-00	METAL GLAZE	560 5% 1/10W
R240	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R241	1-216-025-00	METAL GLAZE	100 5% 1/10W
R242	1-216-025-00	METAL GLAZE	100 5% 1/10W
R243	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R248	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R249	1-216-043-00	METAL GLAZE	560 5% 1/10W
R250	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R251	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R252	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R253	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
R254	1-216-045-00	METAL GLAZE	680 5% 1/10W
R255	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
R256	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
R257	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R258	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R259	1-216-025-00	METAL GLAZE	100 5% 1/10W
R260	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R261	1-216-025-00	METAL GLAZE	100 5% 1/10W
R262	1-216-035-00	METAL GLAZE	270 5% 1/10W
R263	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R264	1-216-043-00	METAL GLAZE	560 5% 1/10W
R265	1-216-025-00	METAL GLAZE	100 5% 1/10W
R266	1-216-033-00	METAL GLAZE	220 5% 1/10W
R267	1-216-091-00	METAL GLAZE	56K 5% 1/10W
R268	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R271	1-216-075-00	METAL GLAZE	12K 5% 1/10W
R272	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R273	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R274	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R275	1-216-033-00	METAL GLAZE	220 5% 1/10W
R276	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
R277	1-216-117-00	METAL GLAZE	680K 5% 1/10W
R278	1-216-089-91	METAL GLAZE	47K 5% 1/10W
R279	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R280	1-216-039-00	METAL GLAZE	390 5% 1/10W
R282	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R283	1-216-045-00	METAL GLAZE	680 5% 1/10W
R284	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R285	1-216-089-91	METAL GLAZE	47K 5% 1/10W
R286	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R288	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R289	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R290	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R291	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R292	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R294	1-216-089-91	METAL GLAZE	47K 5% 1/10W
R295	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
R296	1-216-085-00	METAL GLAZE	33K 5% 1/10W
R298	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W
R299	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
R1201	1-216-079-00	METAL GLAZE	18K 5% 1/10W
R1202	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R1203	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W
R1204	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
R1205	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W
R1206	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W
R1207	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R1208	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W

REF.NO.	PART NO.	DESCRIPTION	REMARK
R1209	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R1210	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R1211	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R1212	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R1213	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W
R1214	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R1215	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R1216	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W
R1217	1-216-033-00	METAL GLAZE	220 5% 1/10W
R1218	1-216-089-91	METAL GLAZE	47K 5% 1/10W
R1219	1-216-115-00	METAL GLAZE	560K 5% 1/10W
R1220	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R1221	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
R1222	1-216-085-00	METAL GLAZE	33K 5% 1/10W
R1223	1-216-075-00	METAL GLAZE	12K 5% 1/10W
<VARIABLE RESISTOR>			
RV201	1-241-761-11	RES, ADJ, CARBON 1K	
RV202	1-241-763-11	RES, ADJ, CARBON 4.7K	
*****			
H BOARD, COMPLETE			
*****			
9-908-867-01	HOLDER, LED		
9-908-869-01	KEY TOP		
9-990-891-01	BOARD, REFLECTION A		
9-990-892-01	BOARD, DISPENSION A		
<CAPACITOR>			
C1111	1-126-157-11	ELECT	10MF 20% 16V
<DIODE>			
D1111	9-908-868-01	DIODE TLS263P	
D1112	8-719-802-17	DIODE TLY263P	
D1113	8-719-802-17	DIODE TLY263P	
D1114	8-719-802-17	DIODE TLY263P	
D1115	8-719-802-17	DIODE TLY263P	
D1116	8-719-802-17	DIODE TLY263P	
D1117	8-719-802-17	DIODE TLY263P	
D1118	8-719-802-17	DIODE TLY263P	
D1119	8-719-802-17	DIODE TLY263P	
D1120	8-719-802-17	DIODE TLY263P	
D1121	8-719-802-17	DIODE TLY263P	
D1122	8-719-802-17	DIODE TLY263P	
D1123	8-719-802-17	DIODE TLY263P	
D1124	8-719-802-17	DIODE TLY263P	
D1125	8-719-802-17	DIODE TLY263P	
D1126	8-719-802-17	DIODE TLY263P	
D1127	8-719-802-17	DIODE TLY263P	
D1130	8-719-802-17	DIODE TLY263P	
D1131	8-719-802-17	DIODE TLY263P	
D1132	8-719-802-17	DIODE TLY263P	
D1133	8-719-802-17	DIODE TLY263P	
D1134	8-719-911-19	DIODE ISS119	
D1135	8-719-911-19	DIODE ISS119	
D1136	8-719-911-19	DIODE ISS119	
D1137	8-719-911-19	DIODE ISS119	
<IC>			

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

PVM-2950Q/2950QM  
RM-854

H

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
IC1111	9-902-229-01	IC GP1U52R		*4-044-689-01		INDIVIDUAL CARTON (PVM-2950Q)	
				*4-388-954-01		BAG, PROTECTION	
		<RESISTOR>				REMOTE COMMANDER	
R1111	1-247-807-11	CARBON 100 5% 1/4W		1-467-798-11		REMOTE COMMANDER (RM-854)	
R1112	1-247-807-11	CARBON 100 5% 1/4W		9-901-890-11		COVER, BATTERY (FOR RM-854)	
R1113	1-247-879-11	CARBON 100K 5% 1/4W					
R1114	1-247-879-11	CARBON 100K 5% 1/4W					
R1115	1-247-879-11	CARBON 100K 5% 1/4W					
R1116	1-247-879-11	CARBON 100K 5% 1/4W					
R1117	1-249-408-11	CARBON 180 5% 1/4W					
R1118	1-249-403-11	CARBON 68 5% 1/4W					
R1119	1-249-408-11	CARBON 180 5% 1/4W					
R1120	1-249-408-11	CARBON 180 5% 1/4W					
R1121	1-249-408-11	CARBON 180 5% 1/4W					
R1122	1-249-408-11	CARBON 180 5% 1/4W					
		<SWITCH>					
S1111	1-554-303-21	SWITCH, KEY BOARD					
S1112	1-554-303-21	SWITCH, KEY BOARD					
S1113	1-554-303-21	SWITCH, KEY BOARD					
S1114	1-554-303-21	SWITCH, KEY BOARD					
S1115	1-554-303-21	SWITCH, KEY BOARD					
S1116	1-554-303-21	SWITCH, KEY BOARD					
S1117	1-554-303-21	SWITCH, KEY BOARD					
S1119	1-554-303-21	SWITCH, KEY BOARD					
S1120	1-554-303-21	SWITCH, KEY BOARD					
S1121	1-554-303-21	SWITCH, KEY BOARD					
S1122	1-554-303-21	SWITCH, KEY BOARD					
S1123	1-554-303-21	SWITCH, KEY BOARD					
S1124	1-554-118-00	SWITCH, PUSH (1 KEY)					
*****							
		MISCELLANEOUS					
		*****					
$\Delta$ 1-402-715-21		COIL, DEMAGNETIZATION (PVM-2950QM)					
$\Delta$ 1-402-716-21		COIL, DEMAGNETIZATION (PVM-2950QM)					
$\Delta$ 1-426-573-22		COIL, DEGAUSSING (PVM-2950Q)					
$\Delta$ 1-426-574-22		COIL, DEGAUSSING (PVM-2950Q)					
$\Delta$ 1-452-616-13		NECK ASSY, PICTURE TUBE (NA323)					
1-467-794-11		KEY BOARD UNIT					
$\Delta$ 1-580-375-11		INLET 3P					
1-900-140-13		LEAD ASSY, FOCUS					
$\Delta$ 8-451-394-31		DEFLECTION YOKE (Y29EXA)					
V901 $\Delta$ 8-733-845-05		PICTURE TUBE (M68KU210X)					
*****							
		ACCESSORIES AND PACKING MATERIALS					
		*****					
$\Delta$ 1-557-377-11		CORD, POWER (3 CORE) (10.0A/125V) (PVM-2950Q)					
$\Delta$ 1-590-151-11		CORD SET, POWER (10.0A/250V) (PVM-2950QM)					
2-990-242-01		HOLDER (B), PLUG (PVM-2950Q/2950QM(AEP))					
3-170-078-01		HOLDER (B), PLUG (PVM-2950QM(AUS))					
3-759-190-21		MANUAL, INSTRUCTION					
*4-039-562-02		CUSHION (RIGHT UPPER FRONT)					
*4-039-566-02		CUSHION (LEFT UPPER LOWER)					
*4-039-570-01		CUSHION (UPPER) (ASSY)					
*4-039-571-01		CUSHION (LOWER) (ASSY)					
*4-044-688-01		INDIVIDUAL CARTON (PVM-2950QM)					